

DeNederlandscheBank

EUROSYSTEEM



The transition to alternative benchmark rates

Feedback report on the interest-rate benchmarks exposures of Dutch financial institutions

2020 edition (based on Q2 data)
25-Nov-2020

Executive summary

As part of their efforts to monitor the worldwide transition to alternative interest-rate benchmarks, De Nederlandsche Bank (DNB) and the Autoriteit Financiële Markten (AFM) have collected information from a selection of Dutch banks, pension funds, insurers, and asset managers. Institutions surveyed as well as other financial institutions are invited to take full account of this feedback report.

This report sets out the main findings of the information request, which in summary comprise the following:

- Interest-rate benchmarks are widely used throughout the entire product chain of financial institutions, most notably in interest-rate derivatives. Of all interest-rate benchmarks, EURIBOR is the most frequently used.
- For most products under consideration in our sample, the median institution references an alternative benchmark for most of its outstanding contracts.
- Most of the contracts linked to alternative benchmarks reference EURIBOR, with the share of contracts referring to risk-free rates being limited.
- With respect to jurisdictions other than the EU, the vast majority of contracts still reference IBOR benchmarks.
- Most IBOR-based contracts, those referring to EONIA being an exception, have a remaining maturity beyond 2022 and will thus need to be amended to reference alternative rates or be provided with a fallback option by 1 January 2022 at the latest.
- A large number of contracts, including those referencing EURIBOR, do not yet include a fallback provision. Moreover, not all newly issued contracts contain appropriate fallback language. Institutions indicate that inserting or updating fallback language in outstanding contracts generally remains challenging. Several market participants are still awaiting international industry protocols before amending outstanding contracts to integrate fallbacks.
- Many institutions state that they nevertheless have started work on including fallbacks where possible and appropriate for certain client groups. Contracts outstanding with non-financial and/or non-professional counterparties, such as mortgages and loans, more frequently include a fallback provision than other types of contracts.
- Not all respondents have started communicating with clients holding contracts that will have to be repapered (i.e., those referencing IBORs or EURIBOR). Those that have commenced their communication provide information proactively on dedicated webpages

or via letters and emails. Institutions that have not yet informed clients do not meet this best practice.

- Respondents selected operational and legal risk as the most important risk categories, followed closely by financial risk. Generally, the outlook was optimistic and overall risks were seen to be decreasing.
- In terms of risk mitigation, most of the respondents have set up a centralised project team to manage the IBOR transition. Institutions that have not yet established a centralised project team do not meet this best practice. Other forms of mitigation include adhering to the ISDA Benchmarks Supplement Protocol, modifying documentation, and implementing fallback clauses in documentation.

The report also contains an overview of recent developments that are relevant to the IBOR transition, including the evolution of the liquidity of the designated risk-free rates, industry initiatives, and overall developments relating to the major currency areas.

The following interest-rate benchmarks have been considered in the analysis. Benchmarks are classified as either 'IBOR' or 'alternative'. All alternative benchmarks save EURIBOR are considered risk-free.

Jurisdiction	IBOR (fallback required)	Alternative benchmark
EU	EONIA	€STR EURIBOR (fallback required)
US	USD LIBOR	SOFR
UK	GBP LIBOR	SONIA
Japan	JPY LIBOR	TONAR
Switzerland	CHF LIBOR	SARON (fallback required)

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Introduction

Throughout the world, a transition is currently taking place from interbank offered rates (IBORs) to alternative benchmarks. The IBOR transition was initiated as a policy response to two developments. First, a number of traditional interest-rate benchmarks, notably LIBOR, were affected by market manipulations that severely undermined their integrity. Second, the underlying market for unsecured interbank funding experienced a marked decrease in transactions and continues to do so, eroding the degree to which IBORs represent the funding costs of financial institutions.

In the EU, the transition to alternative interest-rate benchmarks is governed by the Benchmarks Regulation (BMR).¹ This Regulation, applicable to a range of benchmarks including interest-rate benchmarks, stipulates requirements for administrators and users of benchmarks as well as their contributors. Pursuant to the BMR, IBOR-based contracts need to be amended to reference alternative rates or provided with a fallback option by 1 January 2022 at the latest. The need for fallback provisions also applies to EURIBOR- and SARON-based contracts. The BMR aims at enhancing the reliability and robustness of benchmarks. The Regulation came into effect on 1 January 2018, with a transition regime for critical and third-country benchmarks (i.e., all benchmarks under consideration in this report) applying until 31 December 2021.

Background on the information request

As part of their efforts to monitor the benchmark transition, De Nederlandsche Bank (DNB) and the Autoriteit Financiële Markten (AFM) have collected information from a selection of Dutch banks, pension funds, insurers and investment firms. This information request aims to generate detailed data on the status of the transition at Dutch financial institutions, and will be repeated on a semi-annual basis until the end of 2021. The results of these surveys will enable DNB and the AFM to monitor and influence the progress of the transition over time.

About this report

This report comprises three parts. Part 1 presents the main quantitative findings of the data request, consisting of an overview of the use of benchmarks by sector and transition metrics on the progress of the IBOR reform. Part 2 summarises the responses to the survey's qualitative questions. Part 3 provides a summary of recent developments related to the transition. Terms used are defined in the Annex.

¹ Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014.

1 Analysis – quantitative information

This section provides an overview of the main interest-rate benchmarks used by the Dutch financial institutions included in the survey. It also contains a snapshot on the degree to which these institutions are advancing in their transition to alternative benchmarks. Our data sample consists of 82 Dutch financial institutions, of which 21 banks², 55 pension funds, 5 insurers, and 1 asset manager³. In order to provide a comprehensive overview of the different aspects of the transition, benchmark exposures are set out across the following dimensions:

- i. IBOR contracts versus alternative-rate contracts;
- ii. Expiry dates of the underlying contracts (prior or posterior to the transition deadline);
- iii. The existence of fallback provisions.

These dimensions will be broken down by product type as well as by benchmark type. The transition metrics only show the results in terms of the number of contracts as the transition metrics expressed in terms of gross notional amounts yielded similar figures.

For the purposes of this analysis, EURIBOR has been classified as an alternative benchmark on the basis of it having been authorised as BMR-compliant in the EU by the Belgian competent authority, the FSMA, on 2 July 2019. In contrast to many IBOR-based contracts, EURIBOR-linked contracts can thus continue after 1 January 2022.

When analysing the share of contracts with a fallback option, we have excluded contracts that expire before 2022, since these can be rolled over as contracts referencing approved alternative rates. In addition, only benchmarks that are subject to the BMR are considered, as the fallback requirement does not apply to other benchmarks.

Some definitions have been abbreviated or comprise an aggregation of different items from the original templates of the data request. For a full description of the definitions, please refer to the glossary in the Annex.

This section has two subsections. Section 1.1 gives an overview of the use of benchmarks, and section 1.2 provides metrics for tracking the progress of the transition.

² This only concerns so-called less significant institutions marked as ‘credit institution’ in the Netherlands, save for credit institutions exempt from an IRRBB reporting requirement to DNB. For the full list of less significant institutions marked as ‘credit institution’ in the Netherlands (i.e., the population from which our sample is drawn), please refer to pages 53-54 of the following document: <https://www.bankingsupervision.europa.eu/ecb/pub/pdf/ssm.listofsupervisedentities202010.en.pdf>.

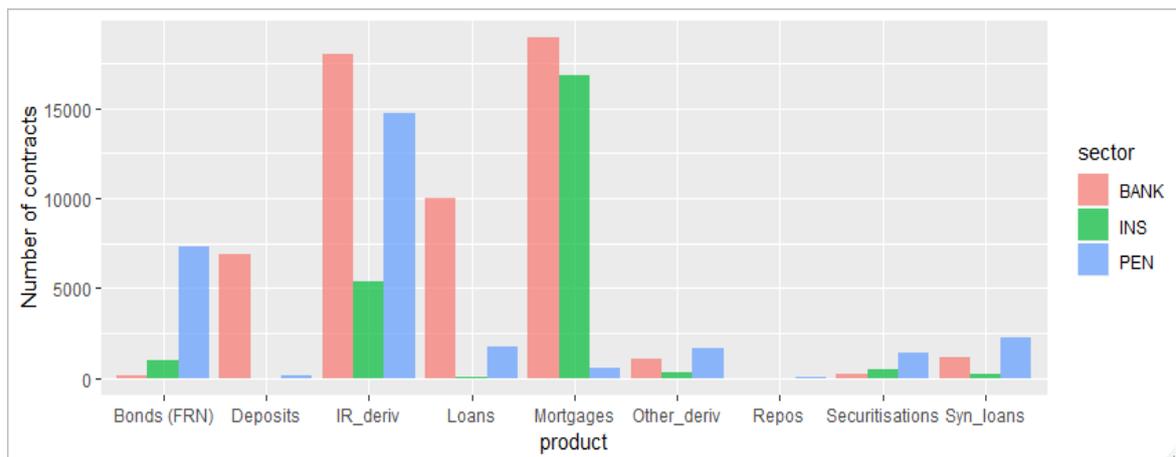
³ Many other asset managers have been addressed indirectly in their capacity as asset managers for pension funds, and are thus included in the latter category.

1.1 The use of benchmarks

Interest-rate benchmarks are widely used throughout the entire product chain of financial institutions (figure 1). All sectors exhibit substantial use of interest-rate benchmarks in their balance-sheet risk management, as indicated by the large number of interest-rate derivative contracts. For banks, a sizeable amount of contracts also relates to customer products, such as mortgages, loans, and deposits, whereas pension funds' exposure to interest-rate benchmarks is, apart from interest-rate derivatives, concentrated in their bond holdings.

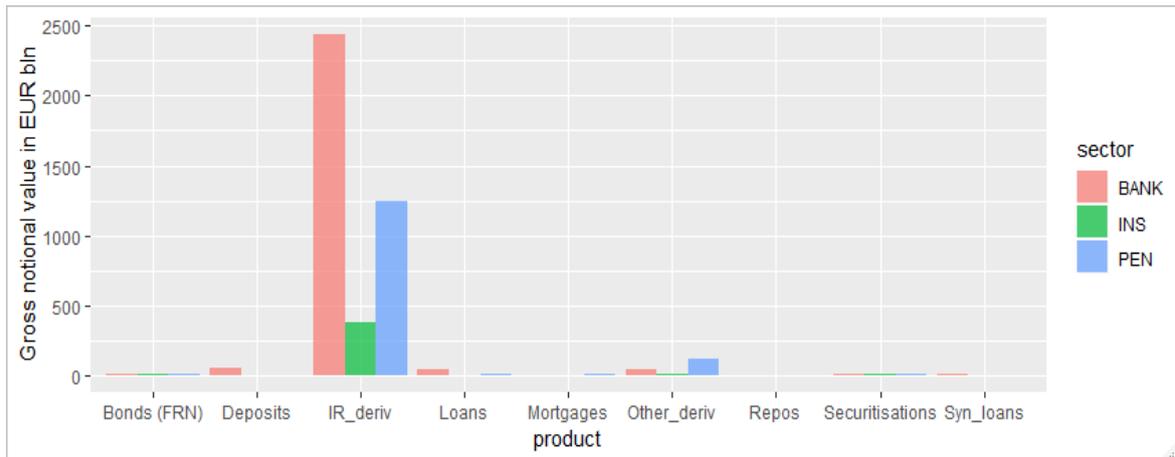
Expressing the interest-rate benchmark products in terms of notional amounts shows a clear skew towards interest-rate derivatives (figure 2). An explanation for this is that these instruments are often applied as hedging instruments for both sides of the balance sheet. Secondly, institutions adjust these positions with regular frequency to align the risk position with their appetite or risk limits, by buying either long or short positions, increasing the gross notional value of derivatives.

Figure 1: Number of contracts by sector, broken down by product type



Reading guide for figures 1-4: INS refers to insurers, PEN stands for pension funds, IR_deriv means interest-rate derivatives, both OTC and ETD, other_deriv comprises all other derivatives referencing an interest-rate benchmark, and syn_loans denotes syndicated loans. These notations apply throughout all figures. More comprehensive definitions can be found in the Annex.

Figure 2: Gross notional value by sector, broken down by product type



Breaking down the number of contracts by the respective currency benchmarks, we find a wide use of EURIBOR contracts (figure 3). Readers should note that the volume of USD LIBOR contracts largely relates to a subset of institutions within the sample with a specific business model.

Expressed in terms of notional amounts, the benchmark exposure of our sample largely takes the form of interest-rate derivatives, with EURIBOR, EONIA and GBP LIBOR being the most frequently used benchmarks (figure 4). It should be noted that the use of risk-free benchmarks (€STR, SOFR and SONIA) has remained limited compared to IBOR volumes.

Figure 3: Number of contracts by sector, broken down by benchmarks

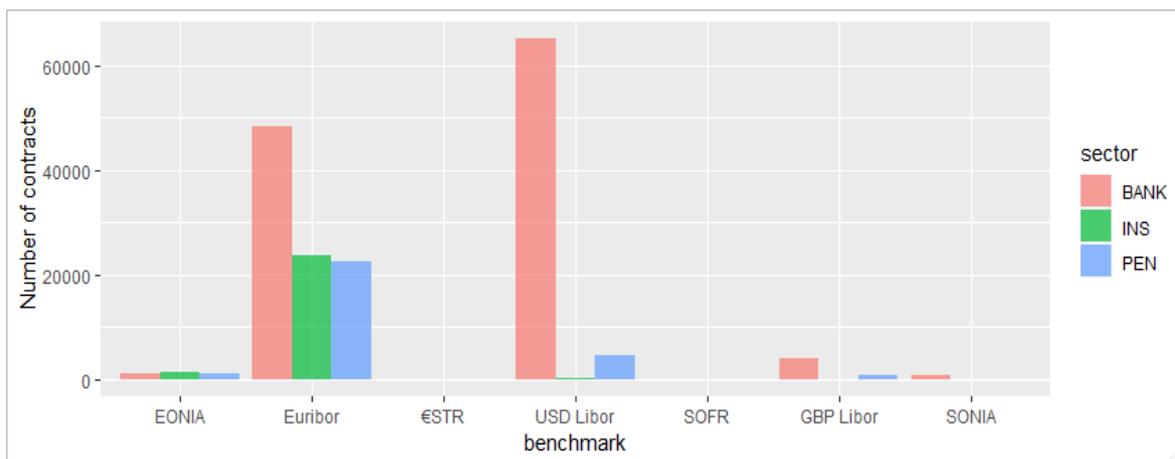
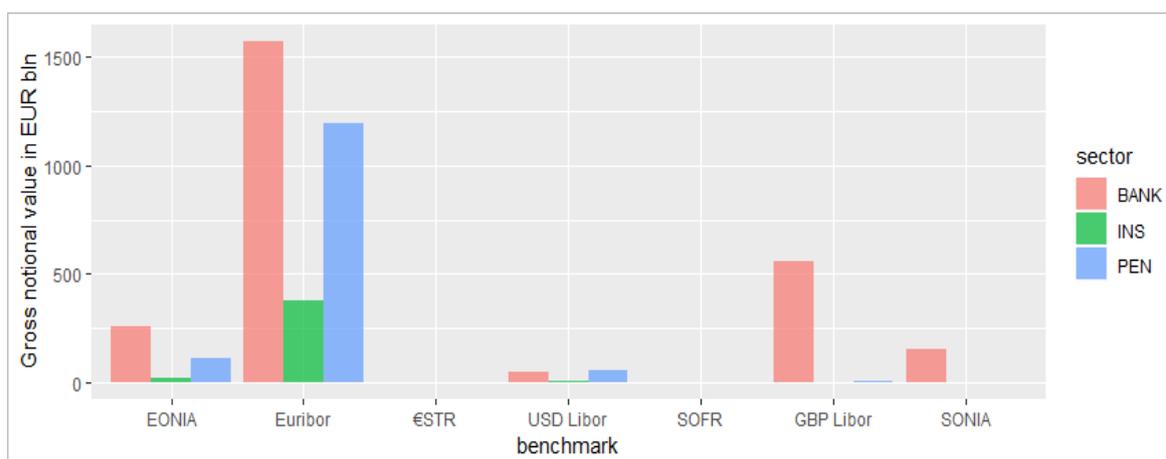


Figure 4: Gross notional value by sector, broken down by benchmarks



1.2 Transition metrics: Aggregate picture

To monitor institutions' progress in transitioning to alternative benchmark rates, we use two types of transition metrics. First we look at the share of contracts linked to alternative rates in the total number of contracts, given that all contracts need to have replaced references to IBORs with alternative rates by 1 January 2022. Secondly, we look at the share of contracts that include a fallback option, as all benchmarks subject to the BMR need to be provided with a fallback rate.

In the figures to be shown, the red colour indicates a low degree of progress, whereas the green colour denotes a high degree of progress concerning the respective transition metric. A white colouring means that the respective sector has no exposure to the product or benchmark in question. The colour code could be read in conjunction with the size of the product or benchmark exposure reported in figures 1 to 4 to get an understanding of the materiality of the respective item.

1.2.1 Transition to alternative rates

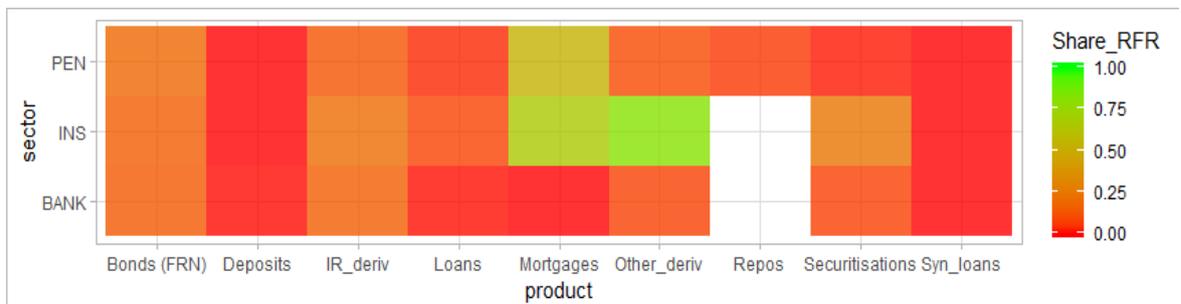
From figure 5 it appears that all sectors are well underway in transitioning to alternative rates as indicated by the green landscape across product types. However, when excluding EURIBOR-linked contracts from the data, the picture becomes redder, as shown in figure 6. For deposits and syndicated loans nearly all contracts are still linked to IBORs, whereas derivative and bond markets show only limited movement towards alternative rates. In their mortgage portfolios, pension funds and insurers have started to adopt alternative rates, while banks predominantly use IBOR benchmarks in floating-rate mortgages. Breaking down the share of alternative-rate contracts by currency clearly illustrates the impact of EURIBOR as an alternative rate, see figure 7. For currencies other than EUR, the vast majority of contracts is IBOR-based. These contracts number almost 79,000, covering 45% of total contracts reported.

Figure 5: Share of alternative-rate contracts, including EURIBOR, by product type



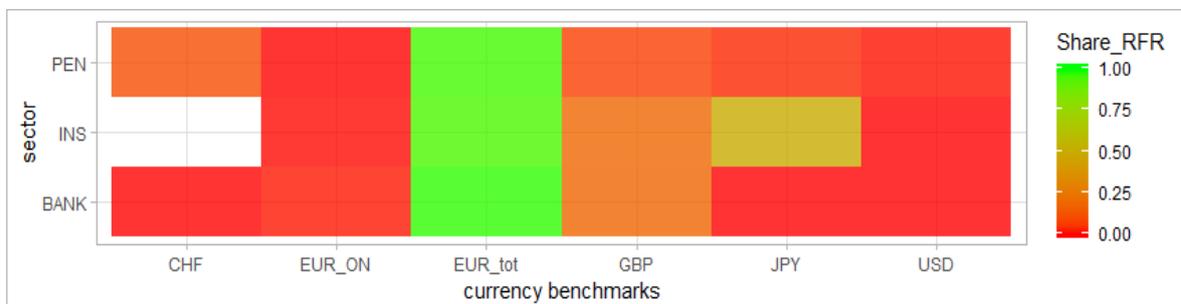
Reading guide: This figure displays the share of alternative rate contracts in the total number of contracts, aggregated by sector and broken down by product type. Red colouring is used to indicate IBOR-based contracts, while green colouring denotes alternative rate-based contracts. EURIBOR is considered an alternative benchmark. Deposit exposures reported by insurers and pension funds comprise their own deposits as opposed to them holding deposits for clients.

Figure 6: Share of alternative-rate contracts, excluding EURIBOR, by product type



Reading guide: This figure displays the share of alternative rate contracts (all of which are risk-free in this specific case) in the total number of contracts, aggregated by sector and broken down by product type. Red colouring is used to indicate IBOR-based contracts, while green colouring denotes alternative-rate contracts. White colouring means that the respective sector has no exposure to the product in question, or that such exposure is not applicable. EURIBOR contracts are excluded. Deposit exposures reported by insurers and pension funds comprise their own deposits as opposed to them holding deposits for clients.

Figure 7: Share of alternative-rate contracts, by benchmark currency



Reading guide: This figure displays the share of alternative rate contracts in the total number of contracts, aggregated by sector and broken down by currency. Red colouring is used to indicate IBOR-based contracts, while green colouring denotes alternative-rate contracts. White colouring means that the respective sector has no exposure to the benchmark in question, or that such exposure is not applicable. 'EUR_ON' only includes overnight EUR benchmarks (i.e., EONIA and €STR), whereas 'EUR_tot' comprises overnight and term EUR benchmarks (i.e., EONIA, €STR and EURIBOR).

1.2.2 Inclusion of fallback rates

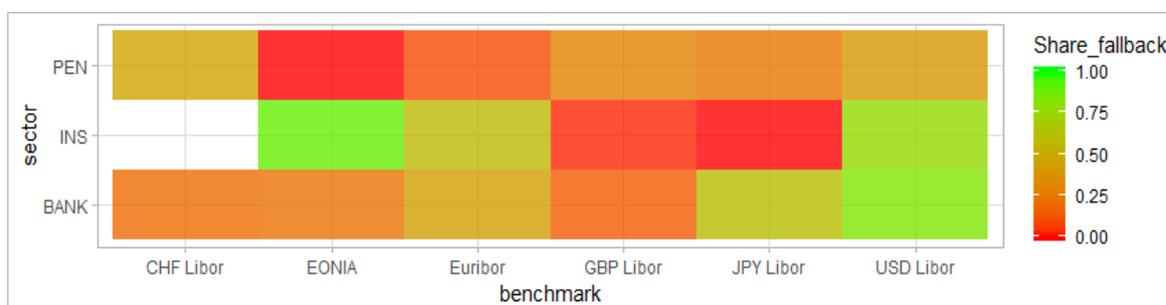
A large number of contracts have not yet been provided with a fallback option. A number of industry associations are developing uniform fallback options for certain financial products, such as derivatives, securitisations, bonds, and syndicated loans.⁴ From the red colouring in figure 8, in conjunction with the responses to qualitative questions, it becomes apparent that several institutions are still awaiting industry-wide agreement on fallback texts before including a fallback option in the contract. For contracts outstanding with non-financial and/or non-professional counterparties, such as mortgages and loans, a larger share of contracts seems to be provided with a fallback option. Considering the share of contracts with fallbacks by benchmark type, it appears that most USD LIBOR contracts contain a fallback (figure 9). Fallback statistics for SARON contracts are not shown, since institutions did not report SARON contracts with a maturity beyond 2022.

Figure 8: Share of contracts with fallback provision, by product type



Reading guide: This figure displays the share of contracts containing a fallback benchmark, aggregated by sector level and broken down by product type. Red colouring indicates the *absence* of a fallback provision; green colouring denotes the *presence* of a fallback provision. White colouring means that the respective sector has no exposure to the product in question, or that such exposure is not applicable. Only contracts that expire after 2022 or without a maturity date, and only contracts that are subject to the BMR (all IBOR benchmarks and alternative rates not administrated by a central bank) are considered, as only these are strictly in need of a fallback.

Figure 9: Share of contracts with fallback provision, by benchmarks



Reading guide: This figure displays the share of contracts containing a fallback benchmark, aggregated by sector level and broken down by benchmarks. Red colouring indicates the *absence* of a fallback provision; green colouring denotes the *presence* of a

⁴ The International Swaps and Derivatives Association (ISDA) for derivatives; the Association for Financial Markets in Europe (AFME) for securitisations; the International Capital Markets Association (ICMA) for bonds; and the Loan Market Association (LMA) for syndicated loans.

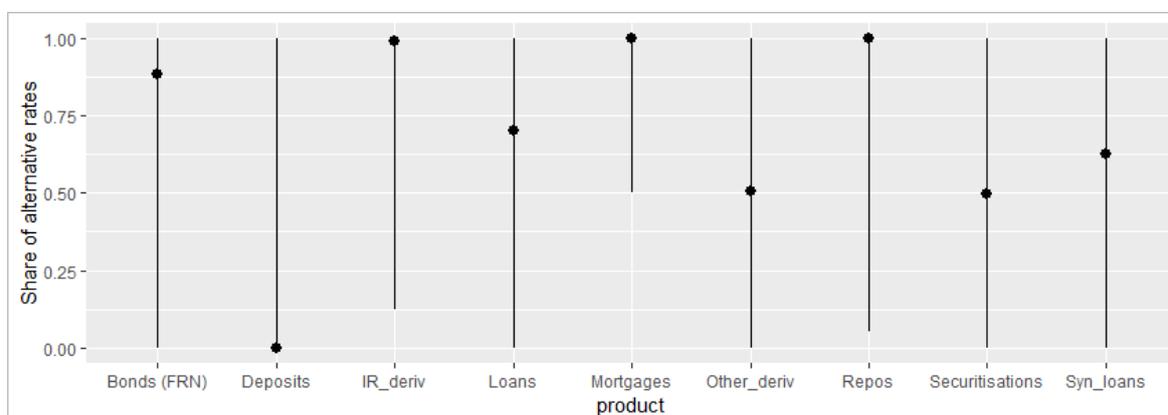
fallback provision. White colouring means that the respective sector has no exposure to the benchmark in question, or that such exposure is not applicable. Only contracts that expire after 2022 or without a maturity date, and only contracts that are subject to the BMR (all IBOR benchmarks and alternative rates not administrated by a central bank) are considered, as only these are strictly in need of a fallback.

1.3 Transition metrics: Distribution amongst institutions

1.3.1 Share of alternative rates

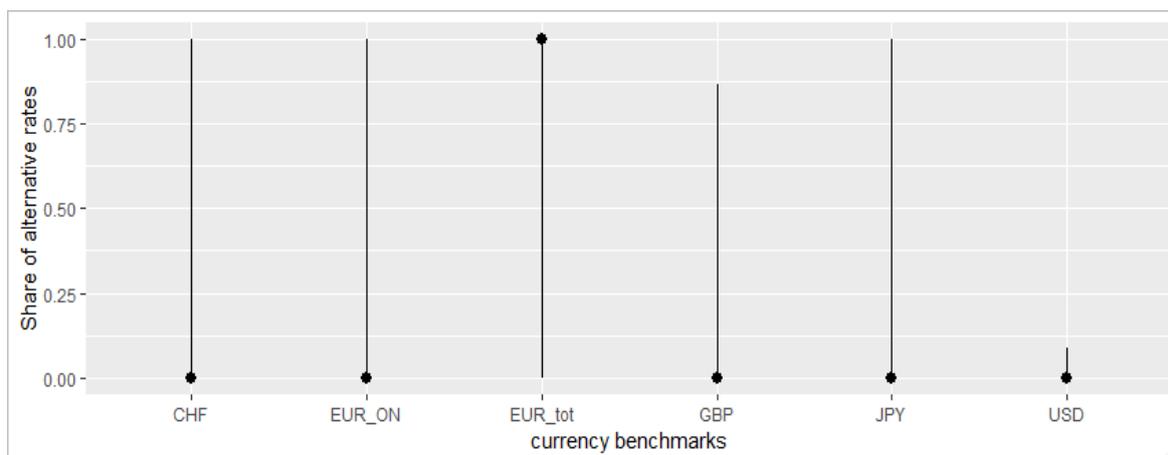
The share of alternative-rate contracts in the total number of contracts varies widely across institutions. The figures below show the median share of alternative rate contracts as well as the minimum and the maximum share by product types and currencies. As can be seen in figure 10, the median institution references an alternative rate in the majority of its contracts for most product types. Importantly, the shares displayed in this figure are relatively high due to the inclusion of EURIBOR as an alternative rate. This becomes apparent in figure 11, where the distribution of the share of alternative rates has been broken down by currency. Almost all contracts of the median institution are still IBOR-based in all currencies. Nevertheless, some institutions have managed to switch to alternative rates, as indicated by the upper end of the lines, representing the institutions with the highest share of contracts referring to alternative rates in the sample.

Figure 10: Institutions’ share of alternative-rate contracts in their total outstanding contracts, by product type (EURIBOR is considered an alternative rate)



Reading guide: This figure displays institutions’ share of alternative-rate contracts in their total outstanding contracts, broken down by product type. The dot represents the median institution, and the upper and lower end of the line represent the minimum and maximum institution, respectively. As an illustration, the first dot on the left should be read as follows: With respect to institutions with floating-rate bond exposures, the median institution references an alternative rate in about 88% of its total floating-rate bond contracts. EURIBOR is considered an alternative rate.

Figure 11: Institutions' share of alternative-rate contracts in their total outstanding contracts, by currency benchmarks

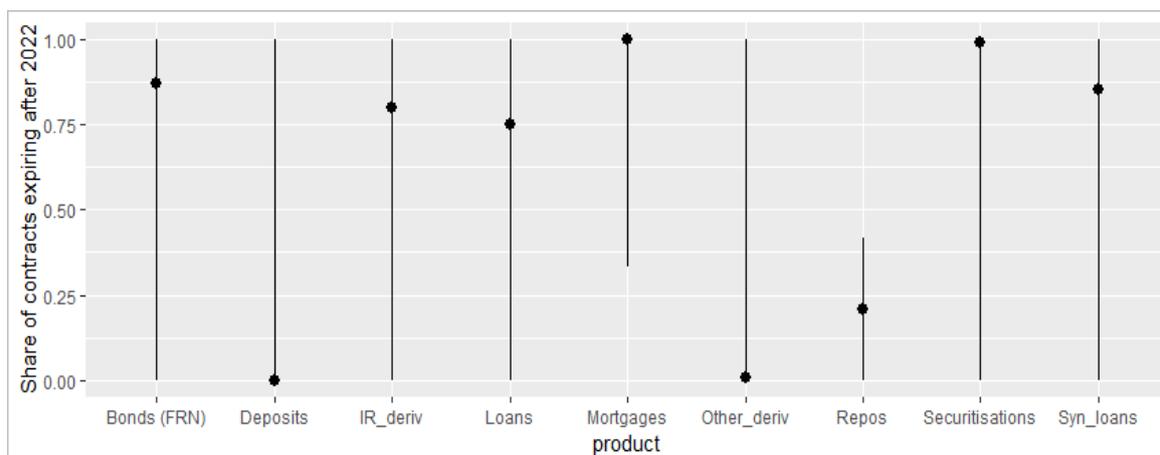


Reading guide: This figure displays institutions' share of alternative-rate contracts in their total outstanding contracts, broken down by currency. The dot represents the median institution, and the upper and lower end of the line represent the minimum and maximum institution, respectively. As an illustration, the first dot on the left should be read as follows: With respect to institutions with CHF exposures, the median institution references an alternative rate in practically none of its contracts. 'EUR_ON' only includes overnight EUR benchmarks (i.e., EONIA and €STR), whereas 'EUR_tot' comprises overnight and term EUR benchmarks (i.e., EONIA, €STR, and EURIBOR).

1.3.2 Outstanding maturities

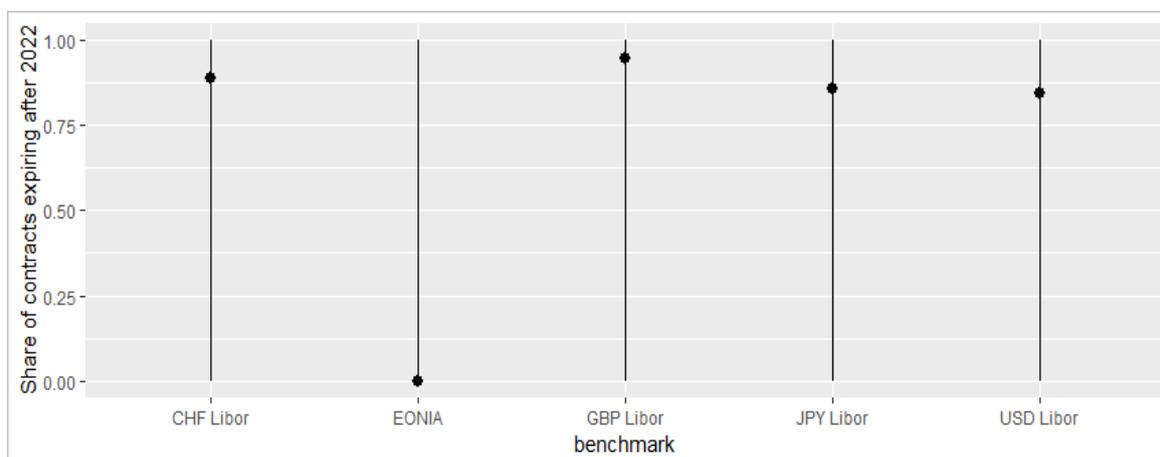
Most IBOR contracts have a remaining maturity beyond 2022 and will thus need to be amended to reference alternative rates or provided with a fallback option by 1 January 2022 at the latest (figure 12). Deposits, FX derivatives, and repo contracts form an exception. Institutions with most contracts expiring after 2022 or without a prescribed maturity face more transition risks, as these contracts need to be substituted by contracts referencing alternative rates or provided with a robust fallback option. Breaking down the IBOR contracts by currency shows a similar picture for non-EUR benchmarks, with EONIA being the clear outlier as a benchmark primarily used for short-term contracts. Readers should note that contracts referencing EURIBOR and SARON, though not included in these figures, also need to contain fallback provisions.

Figure 12: Institutions' share of IBOR-based contracts expiring after 2022 in their total outstanding contracts, by product type (EURIBOR is not considered an IBOR)



Reading guide: This figure displays institutions' share of IBOR-based contracts that expire after 2022 or do not have a maturity in their total outstanding contracts, broken down by product type. The dot represents the median institution, and the upper and lower end of the line represent the minimum and maximum institution, respectively. As an illustration, the first dot on the left should be read as follows: With respect to institutions with IBOR-based floating-rate bond exposures, about 88% of the contracts of the median institution expire after 2022 or contain no maturity. EURIBOR is considered an alternative rate and therefore not an IBOR.

Figure 13: Institutions' share of IBOR-based contracts expiring after 2022 in their total outstanding contracts, by IBOR benchmark (EURIBOR is not considered an IBOR)



Reading guide: This figure displays institutions' share of IBOR-based contracts that expire after 2022 or do not have a maturity in their total outstanding contracts, broken down by IBOR benchmark. The dot represents the median institution, and the upper and lower end of the line represent the minimum and maximum institution, respectively. As an illustration, the first dot on the left should be read as follows: With respect to institutions with CHF LIBOR exposures, about 89% of the contracts of the median institution expire after 2022 or contain no maturity. EURIBOR is considered an alternative rate and therefore not an IBOR.

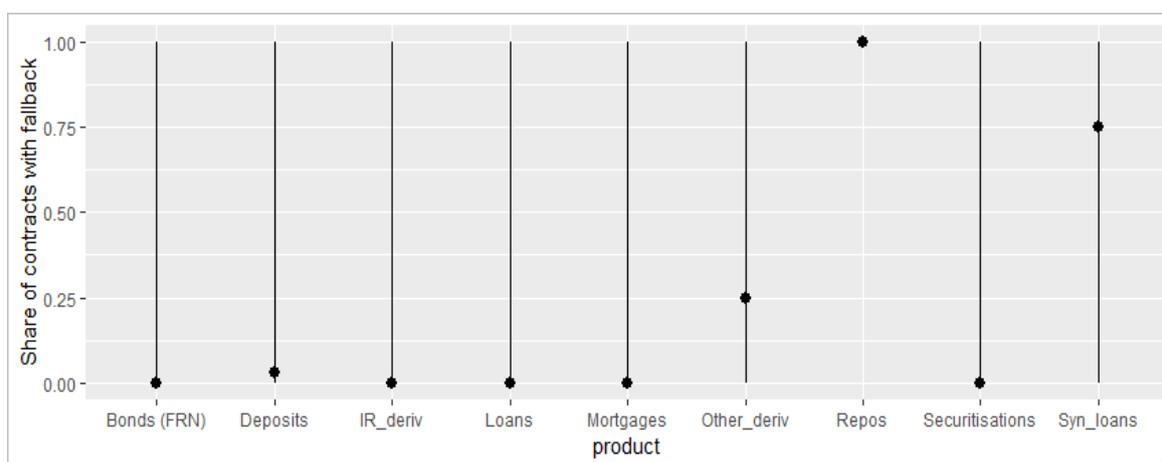
1.3.3. Inclusion of fallback rates

Most contracts referencing benchmarks that are subject to the BMR have not yet been provided with a fallback option. Figure 14 shows that, for the median institution, most contracts have no

embedded fallback rate, though the upper end of the line indicates that some institutions have managed to add fallbacks across all types of products. Syndicated loans show a relatively high adoption of fallback rates. Repos exhibit an even higher percentage, although this is less relevant since repos are predominantly expiring before 2022.

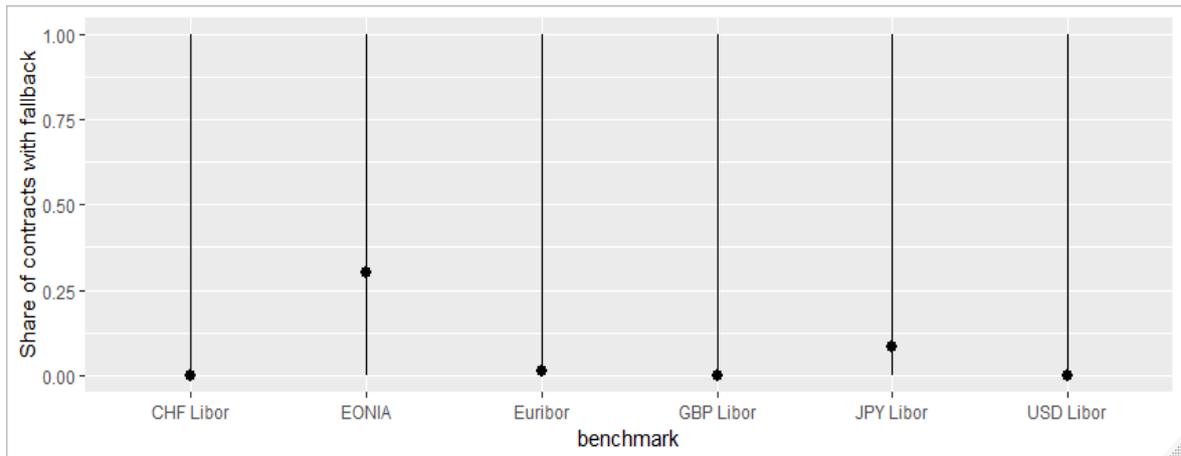
Breaking down the share of fallbacks in terms of benchmarks that are subject to the BMR shows a low overall adoption across benchmarks, see figure 15. EONIA shows a higher percentage, explained by the fact that it already has a successor in the form of €STR. The other benchmarks, besides being published as overnight rates, are also calculated as term rates. The development of term-replacement rates is still ongoing.

Figure 14: Institutions’ share of contracts with fallback provisions in their total outstanding contracts, by product type



Reading guide: This figure displays institutions’ share of contracts that include a fallback benchmark in their total outstanding contracts, broken down by product type. The dot represents the median institution, the upper and lower end of the line represent the minimum and maximum institution, respectively. As an illustration, the first dot on the left should be read as follows: With respect to institutions with floating-rate bond exposures, practically none of the contracts of the median institution contain a fallback rate. Only contracts that expire after 2022 or do not have a maturity date, and only contracts that are subject to the BMR (all contracts referencing IBOR benchmarks and alternative rates not administrated by a central bank) are considered, as only these are strictly in need of a fallback rate.

Figure 15: Institutions' share of contracts with fallback provisions in their total outstanding contracts, by benchmark



Reading guide: This figure displays institutions' share of contracts that include a fallback benchmark in their total outstanding contracts, broken down by product type. The dot represents the median institution, the upper and lower end of the line represent the minimum and maximum institution, respectively. As an illustration, the first dot on the left should be read as follows: With respect to institutions with CHF LIBOR exposures, practically none of the contracts of the median institution contain a fallback rate. Only contracts that expire after 2022 or do not have a maturity date, and only contracts that are subject to the BMR (all contracts referencing IBOR benchmarks and alternative rates not administrated by a central bank) are considered, as only these are strictly in need of a fallback rate.

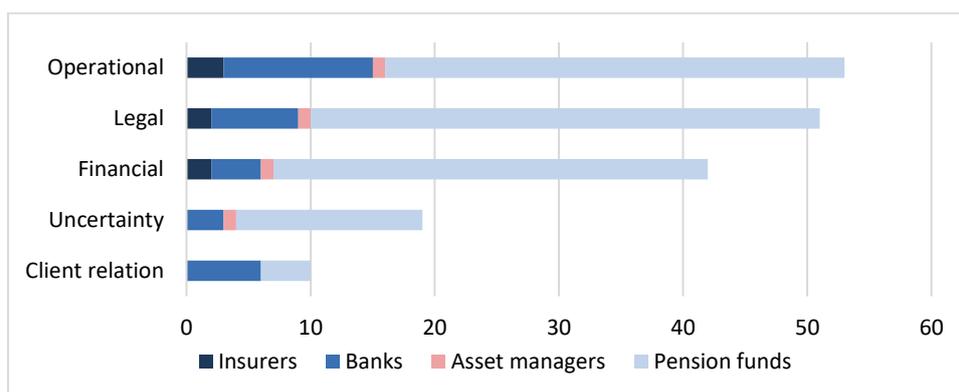
2 Analysis - qualitative information

This section overviews the responses given to the qualitative questions. The qualitative questions provided institutions the opportunity to give additional information, highlight risks, and mention specific challenges being encountered. While by its nature qualitative information is more difficult to analyse and draw definite conclusions from, certain common themes have been identified which are useful to highlight. Readers should note that the best practices formulated in the 2019 feedback report with regard to the below-mentioned risks remain relevant.⁵

2.1 Risks

Among the risk categories identified by the AFM and DNB, respondents pointed to operational and legal risk as the most important categories, followed closely by financial risk. Examples of operational risk include the inability to perform (internal) calculations such as the computation of the net asset value of investment funds, or the incapability to run internal models. Instances of legal risk comprehend disagreements over fallback options and the need to renegotiate contractual terms under substantial time pressure, amongst others. Risk related to client relations and general uncertainty were considered less prominent. Other risks deemed to be important comprise regulatory risk, systemic risk, conduct risk, risk related to counterparties, risk related to fragmentation, and a worsening of liquidity if different replacement rates were adopted for the same IBOR.

Figure 16: Most important risk categories reported by surveyed institutions



Reading guide: This chart exhibits the number of times a risk is considered as “most important” by respondents, broken down by type of sector. For example, four pension funds considered client-relation risk as most important. Institutions could mention multiple risks.

⁵ De Nederlandsche Bank and Autoriteit Financiële Markten, *Transition to alternative benchmark rates: Feedback report on the survey*, 25 September 2019, available on <https://www.afm.nl/~/profmedia/files/rapporten/engels/benchmark-rates-transition-response-feedback.pdf?la=nl-NL>.

As to new risks that might have emerged as a result of the IBOR transition, the outlook was optimistic and overall risks were seen to be decreasing. The completion of the reform of EURIBOR in November 2019, and its authorisation by the FSMA earlier that year, as well as the support for EURIBOR given by ESMA, stating that EURIBOR can be used by EU supervised entities “for the foreseeable future”, has eliminated certain legal and operational risks relating to an unexpected or short-term cessation of EURIBOR.⁶ Regarding the transition from EONIA to €STR, most parties did not experience problems so far, although not all parties have completed this transition.

Certain (categories of) risks were nevertheless seen to be increasing. Financial risk was perceived as being on the rise due to the lack of liquidity in alternative rates and a varying spread between IBORs and alternative rates. Moreover, different discounting regimes between cleared and bilateral derivatives may create additional operational risk.

In terms of risk mitigation, most respondents have set up a project team to manage the IBOR transition, thereby creating a governance structure which ensures that the necessary steps are taken within the organisation. Other forms of mitigation include adhering to the International Swaps and Derivatives Association (ISDA) Benchmarks Supplement Protocol, amending documentation, and implementing fallback clauses in documentation. The actual mitigation of identified risks is an important step, given the complexity which accompanies some of these actions, especially when contract documentation needs to be amended.

2.2 Fallbacks

Inserting or updating fallback clauses in contracts remains a challenge for many institutions. As made clear by figures 14 and 15 above, the inclusion of fallback clauses in contracts is far from universal.

Oft-cited issues include the lack of a sufficiently specific industry standard as well as the lack of adherence by counterparties to existing generic industry standards. As mentioned above, adherence to the ISDA Benchmarks Supplement Protocol will help mitigate this issue for certain categories of derivatives, as will the finalisation of standards for other types of instruments and contracts. However, those standards apply only in case both counterparties to a contract adhere to them. Some respondents mentioned that case-by-case negotiation of fallbacks for non-cleared derivatives might require excessive capacity and costs, and could be misused for other purposes.

Many parties nevertheless indicate that they have started work on including fallbacks where possible and appropriate for certain client groups. Few contracts have been encountered which are impossible to amend, and there were no significant legal impediments identified. Pension funds had the largest shares of impediments. These focused mainly on modifying derivatives

⁶ S. Maijoor, *Introductory remarks at the Second Roundtable on Euro Risk-Free Rates*, 29 September 2019, available on <https://www.esma.europa.eu/file/52817/download?token=W-ErmAEU>, at p. 3.

documentation, both cleared and bilateral. The availability of term rates as fallbacks will have a big impact on the amount of effort required to implement these fallback rates. Overnight (ON) rates will require more work if they constitute the pre-appointed fallback rate, given the difference between ON rates and the traditional IBORs.

Not all newly issued contracts contain appropriate fallback language. The most frequently cited reason is the lack of industry standards. Some respondents explained that they have opted for a discretionary approach by including fallback clauses only in cleared derivative contracts or with counterparties that already adhere to ISDA protocols.

2.3 Client communication

Not all respondents have started communicating with clients holding contracts that will have to be repapered (i.e., those referencing IBORs or EURIBOR). Those that have commenced their communication provide information proactively on dedicated webpages or via letters and emails. Regular individual meetings with clients were also reported. Well-prepared parties have a communication plan in place and are proactively informing their clients. The communication with clients which make use of IBOR- and EURIBOR-based products constitutes an important aspect of the transition. The sellers of such products need to inform their customers in a timely manner about the transition and the expected impact on the product. The Working Group on Euro Risk-Free Rates (henceforth EU Working Group) has created a communication toolkit which can help start these conversations.⁷

⁷ See, on the website of the working group, the section entitled 'Communication toolkit': https://www.ecb.europa.eu/paym/interest_rate_benchmarks/WG_euro_risk-free_rates/html/index.en.html.

3 Overview of transition developments for major benchmarks

This section provides an overview of important developments which have taken place over the course of this year. The section is subdivided into subsections covering the liquidity of the designated risk-free rates, industry initiatives, and overall developments relating to the major currency areas.

3.1 Liquidity of risk-free rates

In terms of absolute levels of liquidity, SONIA constitutes the most liquid alternative rate by far. By contrast, €STR and SARON appear to hitherto be clearly lagging behind their peers in other jurisdictions. When looked at the traded notional values of €STR-linked (OTC) interest-rate derivatives, for instance, €STR volumes are the second lowest among all available risk-free rates (see Table 1, first column). The limited liquidity of €STR and SARON could be explained, respectively, by the existence of EURIBOR (and EONIA until the end of 2021) as an alternative rate, and by the fact that Switzerland constitutes a relatively small economy. A relatively high percentage of the total traded volume of SOFR- and €STR-based interest-rate derivatives pertains to longer-term tenors (see Table 1, second column).

Table 1: Liquidity of RFRs (data pertaining to interest-rate derivatives, YTD for the week ending 9 October 2020)

	Notional traded amount (USD bn)	Percentage of total
SONIA	14508.6	
< 1 year	13757.6	94.8%
1-5 years	406.2	2.8%
5+ years	344.8	2.4%
SOFR	744.1	
< 1 year	486.8	65.4%
1-5 years	195.1	26.2%
5+ years	62.2	8.4%
TONA	210.2	
< 1 year	193.7	92.2%
1-5 years	11.4	5.4%
5+ years	5.1	2.4%

€STR	42.9	
< 1 year	30.7	71.6%
1-5 years	8.6	20.0%
5+ years	3.6	8.4%
SARON	30.1	
< 1 year	27.8	92.4%
1-5 years	1.8	6.0%
5+ years	0.5	1.7%

Source: ISDA SwapsInfo

3.2 Industry initiatives

3.2.1 Development of standard fallback language

Various industry associations, such as ISDA and the Loan Markets Association (LMA), have developed standard fallback texts. The EU Working Group has also developed a general fallback text which can be used but will most likely have to be customised to reflect the particular needs of the contract.

An important recent development in this field is the publication by the EU Working Group of the consultation on fallback texts, which will aim to be specifically tailored to contracts referencing EURIBOR.⁸ ISDA has been actively developing solutions to aid users of ISDA documentation, and has launched the IBOR Fallbacks Supplement to the 2006 ISDA Definitions and the ISDA 2020 IBOR Fallbacks Protocol on 23 October 2020. This documentation will become effective on 25 January 2021. New derivatives contracts that incorporate the 2006 ISDA Definitions and refer to one of the IBORs will contain the new fallbacks. Existing derivatives will incorporate the new fallbacks if both counterparties have adhered to the protocol or otherwise bilaterally agreed to include the new fallbacks in their contracts. The protocol will remain open for adherence after the effective date.

3.2.2 Hedge accounting

Standard-setting bodies such as the International Accounting Standards Board (IASB) have taken action to address the issues relating to financial statements during the transition from an old (IBOR) benchmark to an alternative benchmark. In August 2020 the IASB announced that the

⁸ Please see the dedicated section of the EU Working Group's website: https://www.ecb.europa.eu/paym/interest_rate_benchmarks/WG_euro_risk-free_rates/html/fallbacks_euribor.en.html.

changes had been finalised.⁹ The changes come into effect on 1 January 2021 and are eligible for early take-up. These amendments complement those made in 2019.¹⁰ Three issues have been addressed. Firstly, the effective interest rate can be updated from an IBOR to an alternative rate if the change is a direct consequence of a reform of the IBOR and is limited to amendments directly relating to the change in rate, such as the spread and the reset period. No change to the carrying amount of the financial instrument needs to be made, and the solution is only applicable if the transition is made on an economically equivalent basis. Secondly, relief has been provided so that changes pursuant to the IBOR transition do not cause a discontinuation of hedge relationships. Changes required by the IBOR transition can be made without discontinuing hedge accounting if the hedge continues to meet the criteria for hedge accounting. Lastly, disclosure of information is required regarding new risks arising from the ongoing IBOR reform, as well as the general management of the transition to RFRs.

3.3 Overall developments relating to the euro area

The EU Working Group has over the past year focused on preparing market participants for the imminent move from EONIA to €STR and equipping market participants with guidance to assist them throughout that change. In recent months the focus has moved to EURIBOR, where the development of future-proof fallbacks constitutes the main area of work. A set of consultations on this topic will be published in November and DNB and the AFM encourage market participants to participate. Furthermore, at the end of 2019, a series of recommendations were published on the transition from EONIA, ranging from a communication with clients toolkit to guidance on how to address complex operational and legal issues.

Clearing houses that clear euro-denominated products (in particular LCH, Eurex, and CME) changed their discounting and price alignment interest (PAI) regimes from EONIA to €STR during the weekend of 25-26 July 2020. The switch had originally been planned for mid-June 2020 but was postponed due to COVID-19. No problems have been reported by market participants. Compensation for collateral adjustments necessitated by the transition was settled in cash.

On 24 July 2020, the European Commission published its proposal to amend the BMR. The suggested modifications to the existing Benchmarks Regulation are threefold. First, the European Commission would acquire the power to designate a replacement benchmark in the event of the disappearance of a critical benchmark. This replacement rate would automatically be inserted into contracts in order to avoid major disruptive consequences. Second, the Commission would be able to exempt certain third-country currency benchmarks from the Benchmarks Regulation to ensure that these benchmarks can continue to be used by EU companies after the transition period (ending in 2022) to hedge currency risks, thus safeguarding their competitive position in relation to, for example, the US and Asia. Finally, the transition period for third-country benchmarks would be

⁹ Please see <https://www.ifrs.org/news-and-events/2020/08/iasb-completes-response-to-ibor-reform/>.

¹⁰ Please see <https://www.ifrs.org/projects/2019/ibor-reform-and-its-effects-on-financial-reporting-phase-1/>.

further extended, until 2025 at the latest. This is in line with the transition period currently proposed by the UK Treasury for the UK under its post-Brexit benchmark rules. The Commission's proposal is currently being discussed in the EU's legislature. The outcome is expected before the end of 2020.

On 29 September 2020, ESMA published a new set of draft regulatory standards (RTSs) under the BMR. The RTSs are aimed at governing the implementation of the BMR to ensure the accuracy and integrity of benchmarks throughout the EU.

EIOPA published a discussion paper in January 2020 focusing on issues within the EIOPA risk-free rate environment.¹¹ EIOPA intends to follow up by publishing a consultation paper with specific policy recommendations in this area.

To assist banks in their preparation for the transition, ECB Banking Supervision published on 23 July 2020 a list of good practices setting out how banks can best navigate the IBOR transition. These good practices constitute a follow-up to the 'Dear CEO letters' sent out in the third quarter of 2019.

On 30 September 2020, the ECB issued a statement of compliance with the Principles for Financial Benchmarks developed by the International Organisation of Securities Commissions (IOSCO Principles).¹² This statement shows how the ECB, in its administration of the €STR, abides by the IOSCO Principles, which constitute international best practice.

3.4 Overall developments relating to the US

Clearing houses' (LCH, CME, Eurex) discounting and PAI switch from the federal funds rate to SOFR took place on the weekend of 17-18 October 2020. No glitches have been reported at the time of writing.

On 27 August 2020, the Alternative Reference Rates Committee (ARRC) published updated recommended contractual fallback language for new originations of USD LIBOR bilateral business loans. The ARRC continues to prescribe term SOFR as the first level of the fallback waterfall. However, as part of the second level, the ARRC proposes the use of the Daily Simple SOFR with a view to obtain alignment with synthetic loans. The Committee also advocates that new bilateral loans incorporate pre-appointed or hedge fallbacks by 31 October 2020.

The ARRC has called on the New York State Legislature to replace USD LIBOR with an alternative rate by force of law. This is a similar solution to that currently being negotiated in the EU for EU

¹¹ European Insurance and Occupational Pensions Authority, *EIOPA Discussion Paper IBOR transitions*, January 2020, available on <https://www.eiopa.europa.eu/sites/default/files/publications/consultations/eiopa-bos-20-009-discussion-paper-on-ibor-transitions.pdf>.

¹² Please see <https://www.ecb.europa.eu/press/pr/date/2020/html/ecb.pr200930~b3729fa34d.en.html>.

critical benchmarks as classified by the BMR.¹³ It is important to note that these legislative solutions should be considered a last resort and may not provide a desirable solution for all contracts. It should only be implemented for genuinely tough legacy contracts and instruments.¹⁴ All users of IBORs should review their contracts and amend them if possible.

3.5 Overall developments relating to the UK

The Financial Conduct Authority (FCA) continues to warn that an announcement regarding the discontinuation of LIBOR may be made soon. Users of LIBOR should take steps to ensure that they transition as soon as possible and are adequately prepared.

Clearing houses that clear sterling products already utilise SONIA in their PAI and discounting calculations.¹⁵ Therefore, no transition will have to take place for GBP-denominated contracts.

In September 2020, the Sterling Risk-Free Rate Working Group issued recommendations encouraging loan markets to move consistently toward SONIA as implemented via a compounded-in-arears methodology. The specific approach advocated in the report is that of a Five Banking Days Lookback without Observation Shift.¹⁶

On 3 August 2020, the Bank of England (BoE) started publishing the SONIA Compounded Index. The BoE will refrain from publishing SONIA averages due to insufficient consensus between consultation participants. However, it indicated that it would be willing to publish SONIA averages if market views evolve.

In July 2020 ICE, FTSE Russell and Refinitiv commenced their publication of a term SONIA Reference Rate in tenors from one to twelve months. The term rates are constructed by employing SONIA overnight index swap (OIS) quotes.

On 23 June 2020, the UK Finance Ministry announced that it will propose legislation to give the FCA the power to alter LIBOR's methodology.¹⁷ This is often referred to as the creation of a 'synthetic' LIBOR. Draft legislation is expected at the end of the third or in the fourth quarter of 2020.¹⁸ The additional competences can only be employed in case it became clear that the LIBOR

¹³ Please see <https://www.newyorkfed.org/newsevents/speeches/2020/hel200929>.

¹⁴ I.e., contracts that genuinely have no or inappropriate alternatives and no realistic ability to be renegotiated or amended.

¹⁵ O. Hühnerbein & C. Kirch, 'CCP discounting switch to new risk-free rates' (2020) Accenture Finance and Risk Blog, 2 July 2020 entry, available on <https://financeandriskblog.accenture.com/regulatory-insights/regulatory-compliance/ccp-discounting-switch-to-new-risk-free-rates>; Eurex Group, 'FCM Regulations of Eurex Clearing AG, 17 September 2018' (2018), pp. 23 & 25, available on <https://www.eurexclearing.com/resource/blob/1441436/89f0d204c303a424b25cffac62edef0/data/20180917-fcm-history-4.pdf>.

¹⁶ Under this methodology, the SONIA rate is derived from the observation period but weighted according to the days in the interest period. Please see <https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/rfr/statement-on-behalf-of-rfrwg-recommendations-for-sonia-loan-market-conventions.pdf?la=en&hash=074583D7080993CE84B6A381B554BEFD6594C076>.

¹⁷ Please see <https://www.fca.org.uk/news/speeches/LIBOR-transition-critical-tasks-ahead-us-second-half-2020>

¹⁸ J. McKendrick *et al.*, 'The UK's announcement of plans for synthetic LIBOR: Panacea or Pandora's box?' (2020) 8 Journal of International Banking and Financial Law 517.

administrator could no longer produce a representative rate based on panel-bank submissions and there were a material threat to consumers or market integrity. While a synthetic LIBOR would not be capable of restoring the benchmark's representativeness, it could in certain circumstances contribute to the reduction of disruption and dislocation in the final stages of the LIBOR transition.

4 Annex: Glossary of terms used

Bonds (FRN)	On- and off-balance sheet floating-rate notes
INS	Insurance companies
IR_deriv	Interest-rate derivatives, over-the-counter and exchange-traded, whose principal underlyings are interest rates
Loans	On- and off-balance sheet loans and advances
Mortgages	Retail as well as commercial mortgages
Other_deriv	FX derivatives, over-the-counter and exchange-traded, whose principal underlyings are interest rates, and over-the-counter and exchange-traded derivatives whose principal underlyings are not interest rates
PEN	Pension funds
Repos	(Reverse) repurchase agreements and other secured lending instruments
Securitisations	On- and off-balance sheet securitisations
Syn_loans	Syndicated loans

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