



**FMSB**  
FICC MARKETS STANDARDS BOARD

## Spotlight Review

# LIBOR transition Case studies for navigating conduct risks in back book transition

April 2021



## About FMSB

FICC Markets Standards Board Limited (FMSB) is a private sector, market-led organisation created as a result of the recommendations in the Fair and Effective Markets Review (FEMR) Final Report in 2015. One of the central recommendations of FEMR was that participants in the wholesale fixed income, currencies and commodities (FICC) markets should take more responsibility for raising standards of behaviour and improving the quality, clarity and market-wide understanding of FICC trading practices. Producing guidelines, practical case studies and other materials that promote the delivery of transparent, fair and effective trading practices will help increase trust in wholesale FICC markets.

FMSB brings together people at the most senior levels from a broad cross-section of global and domestic market participants and end-users. In specialist committees, sub-committees and working groups, industry experts debate issues and develop FMSB Standards and Statements of Good Practice, and undertake Spotlight Reviews that are made available to the global community of FICC market participants and regulatory authorities.

Find out more about the FICC Markets Standards Board on our website [fmsb.com](https://www.fmsb.com)



## Contents



### Introduction p.3

Spotlight Reviews p.3

Transitioning existing LIBOR-based contracts p.4

Proactive transition p.6



### Case studies p.7

#### Case study 1: Existing fallback language drives value transfer at transaction or portfolio level

(a) Client stands to benefit from existing fallback language p.9

(b) Bank stands to benefit from existing fallback language p.12

(c) Portfolio-level fallback mis-matches and netting effects p.15

Case study 2(a): Significant difference between LIBOR-SONIA spot spread and 5yr spread adjustment p.16

Case study 2(b): LIBOR-SONIA spread changes after agreeing transition p.19

Case study 3: Loan and swap with mis-matched fallbacks p.20

Case study 4: Transitioning structured notes and calculation agent discretion p.22



### Glossary p.24

## Spotlight Reviews

Spotlight Reviews encompass a broad range of publications used by FMSB to illuminate important emerging issues in FICC markets. Drawing on the insight of members and industry experts, they provide a way for FMSB to surface challenges market participants face and may inform topics for future work. Spotlight Reviews will often include references to existing law, regulation and business practices. However, they do not set or define any new precedents or standards of business practice applicable to market participants.

This Spotlight Review builds on, and should be read in conjunction with, the first series of '[LIBOR transition – Case studies for navigating conduct risks](#)' published by FMSB in June 2020 which focused on moving new business off LIBOR. This paper examines certain risks to market fairness and effectiveness that might arise when transitioning existing LIBOR-based contracts with maturities extending beyond end-2021 to alternative risk-free rates.

It will be of interest to market participants across the sell-side, buy-side and corporates, and could be used to help inform the identification and management of certain LIBOR transition-related risks. However, this document is not intended to serve as legal advice, or as a substitute for firms' conduct obligations when offering products linked to LIBOR or alternative rates.

## Contents


- [Introduction](#)
- [Case studies](#)
- [Case study 1\(a\)](#)
- [Case study 1\(b\)](#)
- [Case study 1\(c\)](#)
- [Case study 2\(a\)](#)
- [Case study 2\(b\)](#)
- [Case study 3](#)
- [Case study 4](#)
- [Glossary](#)

## Transitioning existing LIBOR-based contracts

On 5 March 2021, the FCA confirmed that all LIBOR settings will either cease to be provided by any administrator or no longer be representative 'immediately after 31 December 2021, in the case of all sterling, euro, Swiss franc and Japanese yen settings, and the 1-week and 2-month US dollar settings; and immediately after 30 June 2023, in the case of the remaining US dollar settings.'<sup>1</sup> Market participants therefore have less than one year to remove their remaining reliance on LIBOR benchmarks. However, until July 2017 when it became clear that LIBOR would end<sup>2</sup>, few contracts across the cash and derivatives markets envisaged a permanent cessation of these settings. Parties to long-dated derivatives contracts as well as borrowers and lenders are therefore exposed to uncertainty on LIBOR cessation if steps are not taken before end-2021. For these older legacy contracts, there are four broad transition or fallback options depending on the product and contract in question:

- i Proactively transition LIBOR-based contracts to alternative benchmark rates in advance of LIBOR cessation (including contract 'switch' mechanisms)
- ii Proactively amend legacy fallback language
- iii Rely on legacy fallback terms
- iv Rely on a legislative solution for tough legacy contracts

Set out below is a brief summary of these different transition options.

Transition option	Commentary
 <p>Proactively transition LIBOR-based contracts to alternative benchmark rates in advance of LIBOR cessation</p>	<ul style="list-style-type: none"> <li>• Market participants actively amend LIBOR referencing loans or derivative contracts to reference SONIA or another appropriate alternative reference rate before the end of 2021.</li> <li>• Proactive transition includes switch mechanisms which may be adopted by parties wishing to actively transition contracts but who are not yet operationally ready for alternative RFRs. As set out by the Sterling RFR WG, switch mechanisms "provide for an in-built switch from GBP LIBOR to SONIA compounded in arrears (or another alternative reference rate) upon a specified trigger, with the documentation setting out the mechanics and provisions for the use of that rate"<sup>3</sup>.</li> </ul>

## Contents

### Introduction

#### Case studies

##### Case study 1(a)

##### Case study 1(b)

##### Case study 1(c)




##### Case study 2(a)

##### Case study 2(b)

##### Case study 3

##### Case study 4

#### Glossary

 <p>Proactively amend legacy fallback language</p>	<ul style="list-style-type: none"> <li>• Contractual counterparties insert robust fallback provisions into existing contracts to take effect before, or at the time of, LIBOR cessation or converting the contract to reference an alternative rate. These amendments are intended to ensure contracts operate effectively following LIBOR cessation or at the point it is declared unrepresentative.</li> <li>• The application of the ISDA Fallback Protocol is an example of this approach in a derivatives context. The protocol applies to derivatives trades that reference LIBOR or certain other IBOR benchmarks where both parties have adhered to the protocol. Following the protocol, if LIBOR is no longer published or becomes unrepresentative then existing contracts between parties that have adhered to the Protocol will include robust fallbacks.</li> </ul>
 <p>Rely on legacy fallback terms</p>	<ul style="list-style-type: none"> <li>• Market participants take no action to amend existing contractual fallback provisions. Whether firms can rely on such provisions will depend on both the nature of the fallback term and the commercial importance of the LIBOR-dependency to the contract.</li> <li>• In some cases, legacy contracts referencing LIBOR contain fallback language that is not fit for purpose or introduces additional operational, legal and conduct risks for firms. For example, depending on the fallback in question, there is a risk of contractual frustration, inferior terms being introduced or there being a lack of clarity as to the economic impact of LIBOR cessation on the contract.</li> </ul>
 <p>Rely on a legislative solution for tough legacy contracts</p>	<ul style="list-style-type: none"> <li>• Tough legacy refers to those contracts that genuinely have no or inappropriate alternatives and no realistic ability to be renegotiated or amended.<sup>4</sup> Given the difficulties associated with transitioning such contracts off LIBOR, the UK government has proposed under the Financial Services Bill<sup>5</sup>, that the FCA will have powers to require continued publication based on a changed methodology to produce a 'synthetic LIBOR'.</li> <li>• Synthetic LIBOR may be a solution for a limited number of contracts. However, there are certain risks to relying on synthetic LIBOR as a potential option to transition contracts. Firstly, it is not yet officially agreed how synthetic LIBOR will be calculated, so firms and their clients cannot calculate the economic impact of relying on synthetic LIBOR. Secondly, any synthetic LIBOR would not be permanent. Finally, in the proposed legislation, the FCA will also have the power to define which legacy contracts will be allowed to use synthetic LIBOR. Until the legislative process is complete, there will be a degree of uncertainty as to which contracts are in scope but the FCA has already made clear that it does not intend to use its proposed powers 'to require continued publication on a synthetic basis for 26 of the LIBOR settings'<sup>6</sup>. Furthermore, the FCA has underlined that these powers are not an alternative to transition and that they will only be used "in respect of legacy transactions if doing so is necessary to protect consumers or market integrity".</li> </ul>

## Contents

### Introduction

#### Case studies

##### [Case study 1\(a\)](#)

##### [Case study 1\(b\)](#)

##### [Case study 1\(c\)](#)

##### [Case study 2\(a\)](#)

##### [Case study 2\(b\)](#)

##### [Case study 3](#)

##### [Case study 4](#)

#### Glossary

## Proactive transition

There are a number of benefits to actively converting contracts to another rate before the end of 2021. In particular, taking an active approach to transition enables market participants to take a degree of control over the impact of the transition on their contracts, reduce uncertainty and operational risk associated with waiting for LIBOR cessation and helps promote an orderly transition.<sup>7</sup>

Nonetheless, as with the other transition and fallback options, proactively transitioning away from LIBOR-based contracts to alternative benchmark rates in advance of LIBOR cessation gives rise to a number of complexities which firms will need to manage in order to promote a fair and effective transition. In particular, where parties to a contract elect to not adopt industry-recommended approaches or in instances where there is no well-defined industry approach, firms need to carefully assess how to deliver solutions which treat customers fairly while supporting market integrity. Notably:

1. There is a risk of value transfer and the quantum and direction of this value transfer may vary depending on the timing of transition and subsequent benchmark rate movements;
2. There may be mis-matches in fallbacks for underlying cash and associated hedging instruments creating additional complexity for firms; and
3. Where firms are required to exercise some discretion this may give rise to differential client treatment.

These complexities, and corresponding key considerations and good practice observations, are examined in 4 case studies:

### Case Study 1

- Existing fallback language drives value transfer at transaction or portfolio level
  - a) Client stands to benefit from existing fallback language
  - b) Bank stands to benefit from existing fallback language
  - c) Portfolio-level fallback mis-matches and netting effects

### Case Study 2

- a) Significant difference between LIBOR-SONIA spot spread and 5 yr spread adjustment
- b) LIBOR-SONIA spread changes after agreeing transition

### Case Study 3

- Loan and swap with mis-matched fallbacks

### Case Study 4

- Transitioning structured notes and calculation agent discretion

Given the advantages of a proactive transition in reducing uncertainty and avoiding a disorderly transition, the case studies focus on this mechanism. Furthermore, the case studies are intended to illustrate scenarios where the issues faced by market participants are potentially more complex. Firms will be presented with many other scenarios where the associated risks may be easier to manage for example where existing fallbacks are operationally feasible and do not give rise to significant value transfer or where the transition approach adopted is one recommended by the relevant RFR working group.

The case studies are non-exhaustive and it is up to firms and their customers to consider these complexities and determine when and how to transition taking into account the risks and benefits of any options based on the information available to the parties at that time.

## Contents

### Introduction

#### Case studies

#### [Case study 1\(a\)](#)

#### [Case study 1\(b\)](#)

#### [Case study 1\(c\)](#)

#### [Case study 2\(a\)](#)

#### [Case study 2\(b\)](#)

#### [Case study 3](#)

#### [Case study 4](#)

#### [Glossary](#)

## Case studies

### Value transfer

The transition of existing positions or portfolios from LIBOR to an RFR may give rise to economic value transfer thereby putting one of the contractual counterparties in a better position than under the terms of the existing contract. These case studies examine where such value transfer may occur, key considerations for banks and end users when looking at different transition options and good practice observations for managing the associated risks taking into account the overarching principle that firms 'must pay due regard to the interests of [their] customers and treat them fairly'<sup>8</sup>.

### Good practice observations applicable to Case Studies 1 – 3

A number of the good practice observations are likely to be common across the different case studies from both a bank and end-user perspective. These are set out below.



### Bank perspective

- **Impact of transition** – informing the end user early that LIBOR contracts will be impacted by LIBOR transition.
- **Industry standard transition approaches and terms** – informing end users of industry standard transition approaches and terms including the ISDA protocol and fallback / transition terms recommended by the Sterling RFR Working Group, the ARRC and other working groups and industry organisations. Working group approaches may marginally differ by currency and therefore consideration should be given to the recommendations for the currency in question.
- **Transition options** – providing one or more transition options (as appropriate) including industry standard fallback or transition terms.
- **Financial impact** – considering and communicating the financial impact of the existing fallback being triggered and alternative transition options.
- **Transition costs** – clearly communicating any costs that will be incurred as a result of a transition and how these would be borne by the bank or end-user taking into account the overarching principle of treating customers fairly.
- **Bank acting as calculation agent** – where a bank is acting as a calculation agent, clear communication of its responsibilities in that role and disclosure of any conflicts of interest (where appropriate).
- **Independent advice** – it may be appropriate for the bank to suggest that the client considers advice from independent professional advisers on their transition options and the implications of such options, if they have not already done so in relation to the LIBOR transition more generally.

## Contents

[Introduction](#)

### ● [Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)





End user/client  
(e.g. corporate  
or buy-side)  
perspective

- **Industry wide standards** – considering industry-wide transition standards, including the ISDA protocol and recommendations by the Sterling RFR Working Group, the ARRC and other official working groups, regulators or industry bodies.
- **Contract review** – conducting a proactive review of financial transactions to identify those which reference LIBOR.
- **Proactive engagement** – proactively engaging with banks, other counterparties and third party advisors as to the implications of LIBOR discontinuation on these transactions and consideration of alternative transition options.
- **Consistent approach** – seeking to adopt a consistent approach where a client or end-user has multiple transactions referencing LIBOR.
- **Implications of transition** – conducting an assessment of the implications of transition, including mark-to-market impact, cashflow impact, collateral impact, market risk, legal enforceability of existing contracts, accounting impact, funding impact and impact on fiduciary duties.
- **Independent advice** – seeking to understand the transition options, including relative benefits, risks and operational implications.
- **Operational cost** – considering the operational and system costs and risks associated with the different transition options e.g. system upgrade requirements and technology spend.

### Practices that could magnify risks to fair and effective markets applicable to Case Studies 1-3

#### Bank perspective

- **Relying on existing fallback language** – bank relies on existing fallback language that is not fit for purpose or would result in significant value transfer in favour of the bank.
- **Late client engagement** – client engagement is delayed leaving customers with insufficient time to understand their options and make informed decisions.

#### End-user / client perspective

- **Delay** – client delays or does not adequately engage with banks or counterparties.
- **Transition options** – Client fails to consider transition options and the implications of such options.
- **Cherry-picking** – client or end-user ‘cherry pick’ transition options across relationship banks to achieve preferential outcomes.

## Contents

[Introduction](#)

### ● [Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)



1

### Case Study 1(a) Existing fallback language drives value transfer at transaction or portfolio level

## (a) Client stands to benefit from existing fallback language – loan with ‘prior day rate’ as fallback in rising rate environment

### Description

A Corporate has a GBP loan with Bank A which matures at the end of 2030, priced at 3m GBP LIBOR + 100bp. The fallback in the loan contract is the prior day's LIBOR rate.

On 1st April 2021 Bank A approaches the Corporate to discuss actively transitioning the loan from LIBOR to SONIA. At that point in time interest rates are still low and expected to stay low for the remainder of 2021, but the existing yield curves imply an expectation that inflation could rise at the start of 2022 and beyond. On 1st April 2021, market rates are:

Current spot rates

- 3m LIBOR: 5bp
- 3m SONIA swap (forward price of SONIA compounded in arrears): 1bp

Market-implied rate at end of 2021 (based on current swap rates)

- 3m LIBOR: 5bp

Market-implied average rates during 2022 (based on current swap prices)

- 3m SONIA: 19bp

Basis swap rates to maturity (end 2030)

- 3m LIBOR versus SONIA: 11bp

The ISDA 5-year historical median spread between 3m GBP LIBOR and 3m SONIA compounded in arrears has been locked at 11.93bp after the FCA's announcement on 5 March 2021 on the future cessation and loss of representativeness of LIBOR benchmarks.

## Contents

[Introduction](#)

[Case studies](#)

• [Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

1

### Case Study 1(a) Existing fallback language drives value transfer at transaction or portfolio level continued

Option		Rate payable under current contract on 1st April 2021	New rate payable on 1st April 2021	Expected rate payable for Corporate in 2022, after LIBOR cessation date*	Fixed / floating when LIBOR is discontinued
Baseline	Baseline outcome if LIBOR were not discontinued (for comparison purposes only – not feasible in practice)	105bp	105bp	123bp (assuming LIBOR vs SONIA spread same as at 1st April 2021)	Floating
0 – No action	Existing contract is not changed and 'prior day' fallback is triggered when LIBOR is discontinued.	105bp	105bp	105bp	Fixed
1	Agree to insert new 'hard-wired' fallback or 'active switch' into existing contract, with the same terms as the ISDA protocol (but only applying to this transaction)	105bp	105bp	130.93bp	Floating
2	Actively transition to 3m SONIA with standard ISDA 5-year median spread adjustment (i.e. equivalent terms to the ISDA protocol)	105bp	112.93bp	130.93bp	Floating
3	Actively transition to 3m SONIA using forward rate basis between LIBOR and SONIA swaps	105bp	112bp	130bp	Floating

- Baseline outcome in the theoretical scenario where LIBOR were not discontinued (for comparison purposes only)
- No action option as per existing contract
- Industry standard options highlighted by industry working groups

\* Assuming LIBOR is discontinued on 31st December 2021 and synthetic LIBOR is not used as an automatic replacement

## Contents

[Introduction](#)

[Case studies](#)

● [Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

1

### Case Study 1(a) Existing fallback language drives value transfer at transaction or portfolio level continued

#### Risks to market effectiveness or market fairness

- Under the 'No Action' option, the nature of the contract will be fundamentally changed when LIBOR is discontinued from a floating to a fixed rate product rendering the contract potentially unsuitable for the Corporate's needs.
- Options 0 and 1, both with transition via a fallback at the time of LIBOR discontinuation, may increase operational risk if large numbers of fallbacks are triggered at the same time.

#### Key considerations for the Bank and/or Corporate

- **Rationale for using the standard ISDA approach for swaps** – If the Corporate is hedging the loan with a swap, there may be an impact on mark-to-market value, cashflows, collateral and accounting treatment if a different transition approach is used for the swap compared with the loan.
- **Transition options** – Bank A considers which transition options to propose to the Corporate taking into account, where applicable, options identified by industry working groups.
- **Timing** – appropriate timing for agreeing amendments to fallbacks or actively transitioning contracts taking into account the potential for benchmarks and spreads to change. Bank A documents the rationale for the approach adopted.
- **Conduct risks** – conduct risks associated with the different options particularly where these could be perceived to have a potential negative impact on the Corporate, for example if the proposed option:
  - has a higher expected lifetime cost for the Corporate; or
  - results in an increase in immediate payments associated with the loan.
- **Fallbacks** – conduct and/or legal risks for Bank A if the existing fallback is triggered, which changes the loan from floating to fixed rate instrument.
- **Costs** – how any costs associated with transition are allocated between Bank A and the Corporate.

## Contents

[Introduction](#)

[Case studies](#)

• [Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

1

### Case Study 1(b) Existing fallback language drives value transfer at transaction or portfolio level continued

## (b) Bank stands to benefit from existing fallback language – USD commercial loan with fallback to prime

### Description

A Corporate has a bilateral term loan priced at 3m USD LIBOR + 100bp, maturing at the end of 2025. In the existing contract the LIBOR fallback is the USD Prime Rate with no added margin.

The loan is held in the banking book of Bank A and accounted for under the amortised cost approach for loans and receivables.

On 1st January 2023, the Corporate contacts Bank A to understand options for transitioning the loan from LIBOR to SOFR. At that point rates are as follows:

- 3m USD LIBOR: 30bp
- US Prime Rate: 300bp
- 3m SOFR swap (forward price of SOFR compounded in arrears): 5bp
- 3m SOFR Term Rate: 5bp

The ISDA 5-year historical median spread between 3m USD LIBOR and SOFR compounded in arrears is 26.161bp and has been locked after the FCA's announcement on 5 March 2021 on the future cessation and loss of representativeness of the LIBOR benchmarks.

### Contents

[Introduction](#)[Case studies](#)[Case study 1\(a\)](#)[Case study 1\(b\)](#)[Case study 1\(c\)](#)[Case study 2\(a\)](#)[Case study 2\(b\)](#)[Case study 3](#)[Case study 4](#)[Glossary](#)

1

### Case Study 1(b)

Existing fallback language drives value transfer at transaction or portfolio level continued

Option		Rate under current contract on 1st January 2023	New rate on 1st January 2023	Interest rate when fallback triggered (assuming rates same as on 1/1/23)*
Baseline	Baseline outcome if LIBOR were not discontinued (for comparison purposes only)	130bp	130bp	130bp
0 – No action	Existing contract is not changed and prime fallback is triggered when LIBOR is discontinued	130bp	130bp	300 bp
1	Agree to insert new fallback into existing contract, with ARRC recommended 5-year median spread adjustment	130bp	130bp	131.161bp
2	Actively transition to 3m SOFR with standard ARRC recommended 5-year median spread adjustment	130bp	131.161 bp	No fallback due to active transition. Rate remains at 131.161bp

- Baseline outcome in the theoretical scenario where LIBOR were not discontinued (for comparison purposes only)
- No action option as per existing contract
- Industry standard options highlighted by industry working groups

\* Assuming USD LIBOR is discontinued on 30th June 2023 and synthetic LIBOR is not used as an automatic replacement

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

● [Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

### Case Study 1(b) Existing fallback language drives value transfer at transaction or portfolio level continued

#### Risks to market effectiveness or market fairness

- Legacy fallbacks were designed to deal with a temporary rather than permanent cessation of LIBOR. Therefore, seeking to rely on existing fallback language may be commercially inappropriate in the event of full cessation, particularly in circumstances where the resulting interest rate paid by the Corporate would be materially higher.

#### Key considerations for the Bank and/or Corporate

In addition to the key considerations set out in Case Study 1(a) relating to timing, conduct risk and costs, the following points are also relevant in this example:

- **Transition options** – Bank A considers whether to offer a transition option (or options) where it would receive less interest than Prime Rate which is the current contractual fallback.
- **Alternatives** – Bank A considers which alternative transition option or options it proactively offers to the Corporate and how these alternatives should be presented.
- **Overall portfolio** – Corporate considers alternative transition options in the context of their overall portfolio and communicates preference to Bank A.

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

• [Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

1

### Case Study 1(c) Existing fallback language drives value transfer at transaction or portfolio level continued

## (c) Portfolio-level fallback mis-matches and netting effects

### Description

A Corporate has a mix of GBP LIBOR products with Bank A, including several loans and derivatives. The loans and derivatives have different fallback terms in existing contracts. Bank A quantifies the financial impact of existing fallbacks being triggered and finds mixed results. For some transactions the Corporate would be better off financially, while for other transactions the Corporate would pay more and Bank A would gain.

### Risks to market effectiveness or market fairness

- Different accounting treatment of different transactions within the client portfolio may impact financial statements and market risk, even if common transition options and parameters are used.
- A lack of transparency or understanding of the implications of treating contracts on a product-by-product or portfolio level on behalf of the client could drive conduct risk.

### Key considerations for the Bank and/or Corporate

- **Financial impact** – Bank A considers the net financial impact of existing fallbacks being triggered at the level of the corporate portfolio. The ability to conduct such an assessment, and the relevance of the quantification may vary depending on whether the Corporate has a single or multiple relationship banks with whom it has outstanding LIBOR transactions.
- **Options** – Bank A considers the transition options to be presented to the client including the option of treating the products it holds on an individual or portfolio basis and the implications of such options.
- **Disclosures** – Bank A considers the nature of the disclosures to be made to the Corporate in terms of the methodology and parameters used should it elect to quantify the net client impact at portfolio level.
- **Non-industry standard terms** – Bank A considers whether it would be appropriate to offer non-industry standard terms to meet the needs of the customer to mitigate overall portfolio impacts.
- **Rationale** – Corporate determines why it has the portfolio of loan and derivatives products in place in order to inform the preferred solutions and communicates such preferences to Bank A.

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

● [Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)



## Case Study 2(a)

**(a) Significant difference between LIBOR-SONIA spot spread and 5 yr spread adjustment****Description**

A Corporate has a GBP bilateral term loan with Bank B, maturing at the end of 2025. Interest is 3m GBP LIBOR + 100bp. The loan contract has a fallback defined as the rate from a poll of four major dealers in the relevant interbank market. Bank B accounts for the loan on an amortised cost basis.

The loan is designated as ineligible for use of 'synthetic LIBOR' after the end of 2021.

Bank B contacts the Corporate to explain that the dealer poll fallback is unlikely to be available and so an alternative approach will need to be agreed.

On 1st July 2021, Bank B contacts the Corporate to discuss options for transitioning the loan from LIBOR to SONIA. At the point of discussion, market rates are:

Current spot rates

- 3m GBP LIBOR: 5bp
- 3m SONIA swap (forward price of SONIA compounded in arrears): 1bp

Market-implied average rates during 2022 (based on current swap prices)

- 3m SONIA swap: 1bp

Basis swap rates to maturity (end 2025)

- 3m LIBOR versus SONIA: 10.6bp

The ISDA 5 yr median spread between 3m LIBOR and SONIA compounded in arrears is 11.93 bp and has been locked after the FCA's announcement on 5 March 2021 on the future cessation and loss of representativeness of the LIBOR benchmarks.

**[Contents](#)**[Introduction](#)[Case studies](#)[Case study 1\(a\)](#)[Case study 1\(b\)](#)[Case study 1\(c\)](#)● [Case study 2\(a\)](#)[Case study 2\(b\)](#)[Case study 3](#)[Case study 4](#)[Glossary](#)

## Case Study 2(a) Significant difference between LIBOR- SONIA spot spread and 5 yr spread adjustment continued

Option		Rate under current contract on 1st July 2021	New rate on 1st July 2021	Expected rate payable for Corporate in 2022, after LIBOR cessation date*
Baseline	Baseline outcome if LIBOR were not discontinued (for comparison purposes only – not feasible in practice)	105bp	105bp	105bp (assuming LIBOR vs SONIA spread same as at 1st July 2021)
0 – No action	Leave LIBOR contract as-is and allow dealer poll fallback to be triggered when LIBOR is discontinued	105bp	105bp	N/A – Dealer poll unlikely to be available; risk of contract frustration
1	Agree to insert new fallback into existing contract, with 5-year median spread adjustment	105bp	105bp	112.93bp from 1st January 2022
2	Active transition to ‘active switch’ mechanism using 5-year median spread adjustment after LIBOR discontinuation, with LIBOR used before then	105bp	105bp	112.93bp from 1st January 2022
3	Active transition to SONIA with standard 5-year median spread adjustment	105bp	112.93 bp	112.93bp
4	Active transition to SONIA based on forward rate basis between LIBOR and SONIA swaps	105bp	111.6bp	111.6bp

- Baseline outcome in the theoretical scenario where LIBOR were not discontinued (for comparison purposes only)
- No action option as per existing contract
- Industry standard options highlighted by industry working groups

\* Assuming LIBOR is discontinued on 31st December 2021 and synthetic LIBOR is not used as an automatic replacement

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

● [Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

## 2

### Case Study 2(a) Significant difference between LIBOR- SONIA spot spread and 5 yr spread adjustment continued

#### Risks to market effectiveness or market fairness

- Dealer polls are unlikely to operate effectively as a fallback due to challenges in sourcing robust and reliable data from other dealers given the sensitivities of sharing market views on interbank lending levels. Therefore, there is a significant potential risk that in taking no action and thereby triggering the dealer poll fallback when LIBOR is discontinued, it will be operationally unworkable and the contract may be frustrated.

#### Key considerations for the Bank and/or Corporate

- **Transition options** – which transition options to propose to the Corporate taking into account, where applicable, options identified by industry working groups. Options 1 and 2 are effectively the same, although different approaches to define how and when the change to SONIA plus the credit spread adjustment will be made.

#### Good practice observations

- Bank B communicates to the Corporate early to inform them that the LIBOR loan will be impacted by LIBOR transition and that it is unlikely that the Dealer poll fallback will be available.

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

● [Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

[Glossary](#)

## Case Study 2(b)

**(b) LIBOR-SONIA spread changes after agreeing transition****Description**

The Corporate in Case Study 2(a) above decides to actively transition to SONIA with the standard 5 year spread adjustment (i.e. scenario 3 in the table above).

During 2021 SONIA remains constant at 1bp but 3m GBP LIBOR falls from 5bp to 1.5bp.

**Risks to market effectiveness or market fairness**

- As the spread adjustment was locked at the point of transition, the Corporate will not benefit from the falling LIBOR rate. The Corporate may conclude that they would have been better served had Bank B adopted an alternative approach and delayed the transition until end-2021.

**Key considerations for the Bank and/or Corporate**

- **Transition options** – availability of alternative transition options that could have been offered to the Corporate to mitigate the risk of a perceived negative outcome taking into account information that was available to Bank B at the time.
- **Timing** – appropriate timeframes for agreeing amendments to existing contracts between Bank B and the Corporate taking into account the operational challenges of late transition as well as the potential for benchmarks and spreads to change.
- **Operational risks** – delaying the transition until end-2021 may pose operational challenges for Bank B or the Corporate if a significant proportion of contracts are transitioned off LIBOR at the same point.

**Good practice observations**

- Bank B communicates to the Corporate early to inform them that the LIBOR loan will be impacted by LIBOR transition and that there is no fallback defined in the existing contract, which could lead to contract frustration.
- Bank B communicates the fact that both SONIA and LIBOR rates and the spread between them could change before the end of the year.
- Bank B provides alternative transition options, including options where the shift to SONIA plus a credit adjustment spread happens after the discontinuation of GBP LIBOR – either through a fallback or advanced agreement.
- Bank B communicates to the Corporate broader considerations for the timing of transition, including operational risks, making it clear that the Corporate can decide when to transition the loan, provided, at a minimum, an alternative fallback is agreed in advance of the end of 2021 when GBP LIBOR is expected to be discontinued.
- Bank B considers the records it needs to retain in order to demonstrate decision making based on information available at a particular point in the transition. This may include records of material communications with the client, as well as rationale for the product options provided to the Corporate.

**Contents**[Introduction](#)[Case studies](#)[Case study 1\(a\)](#)[Case study 1\(b\)](#)[Case study 1\(c\)](#)[Case study 2\(a\)](#)[Case study 2\(b\)](#)[Case study 3](#)[Case study 4](#)[Glossary](#)

## Case Study 3

## Loan and swap with mis-matched fallbacks

### Description

A Corporate has a bilateral GBP LIBOR loan priced at 3m GBP LIBOR +100bp. The Corporate subsequently hedged the interest rate through an interest rate swap with Bank C, where the Corporate pays 150bp fixed and receives 3m GBP LIBOR +100bp. Both transactions mature at the end of 2025. The net cost of funding for the Corporate is 150bp.

The fallback in the loan contract is the prior day's LIBOR rate. The swap was arranged after the announcement of LIBOR discontinuation and has a fallback in line with the ISDA standard fallback, including a 5-year historical median spread adjustment over SONIA. The loan contract is not changed before the end of 2021 as the client was unresponsive. LIBOR is discontinued at the end of 2021, which triggers the fallbacks on both the loan and swap. The credit spread adjustment under the standard ISDA fallback has been locked at 11.93bp.

At the end of 2021:

- On 31 December 2021, 3m GBP LIBOR = 25bp
- On 1 January 2022, 3m SONIA compounded in arrears is 20bp

By mid-2022, SONIA compounded in arrears has increased to 75bp

The net cost of funding for the Corporate has decreased to 88.07bp (i.e. 125bp – 36.93bp)

- Interest on loan = 25bp (fixed at end of 2021) + 100bp = 125bp
- Net payment on swap = 150bp – (75bp +11.93bp +100bp) = -36.93bp (i.e. Corporate receives net payment on the swap)

Additional mismatches could also occur where there are different conventions for fallbacks for loans and swaps. For example, in the US the ARRC recommended fallback for a loan uses term SOFR while the ISDA protocol for the swap uses SOFR compounded in arrears.

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

● [Case study 3](#)

[Case study 4](#)

[Glossary](#)

### Case Study 3

Loan and swap  
with mis-matched  
fallbacks  
continued

#### Risks to market effectiveness or market fairness

---

- Significant mismatches in fallbacks can create volatility in cashflows and fair value for transactions that were previously perfectly hedged or where any existing mismatches between the derivative and cash product were priced for by the parties to the contract (e.g. in the context of negative interest rates).

#### Key considerations for the Bank and/or Corporate

---

- **Unresponsive clients** – Bank C considers additional steps it could take to address clients that are unresponsive to LIBOR transition.
- **End-user impact** – If Bank C is unable to amend LIBOR-linked contracts prior to LIBOR discontinuation and there is a risk that this could lead to negative impacts for end-users, Bank C may consider what steps it could take to mitigate the impact.

#### Good practice observations

---

- Bank C seeks to identify linked loan and hedge transactions with the same client and any potential mismatches in existing fallbacks.
- Bank C informs the Corporate as early as possible that the LIBOR loan and swap will be impacted by LIBOR transition and that the differences in fallback terms could lead to cashflow impacts for the Corporate.
- Given that the Corporate was unresponsive to Bank C's initial outreach, it sends a follow-up communication providing information on the financial impact of alternative transition options and timings under different future interest rate and spread scenarios. Transition options include options which align the impact on the loan and swap.
- Bank C considers the records it needs to retain in order to demonstrate its attempts to engage with the client. This may include records of follow up communications with the client.

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

• [Case study 3](#)

[Case study 4](#)

[Glossary](#)

**Structured notes**

Transitioning existing LIBOR-linked structured products that mature after end-2021 entails certain complexities, notably where the calculation agent has some discretion to select an alternative reference rate and where there is not a direct relationship between the manufacturer of the products and the end-user. This case study considers these complexities and the steps manufacturers and distributors of structured products may take to seek to manage such complexities.

4

**Case Study 4****Transitioning structured notes and calculation agent discretion****Description**

Bank D is an issuer and manufacturer of structured notes<sup>9</sup> across different programmes, some of which are valued by referencing GBP LIBOR and have maturities extending beyond end-2021. Bank D also performs the role of calculation agent under certain of these structured note programmes. The derivatives which are embedded in the structured notes are, in some cases, complex derivatives which have been designed in order to deliver non-linear returns. Bank D hedges its LIBOR-based exposure where it arises under the structured notes using market-facing OTC derivatives.

The contractual fallback provisions of certain of these structured notes enable Bank D, in its role as calculation agent, to exercise some discretion in determining the alternative rate to be used upon cessation of GBP LIBOR or upon the occurrence of a pre-cessation event.

The structured notes are distributed to end customers either directly by Bank D or through third party financial advisors or wealth managers ('Investment Managers'). The beneficial owners of the structured notes include both retail and professional clients of Bank D and the Investment Managers.

**Risks to market effectiveness or market fairness**

- **Replacement rates** – given that the calculation agent has some discretion to determine the replacement rate on LIBOR cessation or upon the occurrence of a pre-cessation event, this could result in different replacement rates being adopted across structured note programmes where the profile of noteholder types may vary. This could therefore give rise to differential end-customer outcomes across Bank D's structured note programmes.
- **Credit adjustment spread** – where fallbacks confer discretion on the calculation agent, there may be differences in the approach to determining the credit spread adjustment across note programmes giving rise to differential end-customer outcomes across Bank D's structured note programmes.
- **Hedging mismatches** – there may be mismatches between the structured note fallbacks and triggers and those of Bank D's connected derivative hedges resulting in mismatches between Bank D's liabilities and the amount it receives under the corresponding hedges impacting the economics of the structured notes.
- **Indirect communications** – where Bank D does not have a direct relationship with the end-customer, communications may be received by the noteholder indirectly through Investment Managers acting as product distributors increasing communication challenges and risks.

**Contents**[Introduction](#)[Case studies](#)[Case study 1\(a\)](#)[Case study 1\(b\)](#)[Case study 1\(c\)](#)[Case study 2\(a\)](#)[Case study 2\(b\)](#)[Case study 3](#)[● Case study 4](#)[Glossary](#)



## Case Study 4 Transitioning structured notes and calculation agent discretion continued

### Good practice observations

In addition to the key themes set out in our first LIBOR transition Spotlight Review relating to governance, communicating with customers, conflicts of interest and treating customers fairly, Bank D and the Investment Managers consider the following (as applicable):

- **Calculation agent discretion** – where Bank D exercises discretion in its role of calculation agent in selecting a replacement rate, it applies a process which is both fair and, where appropriate, consistent across its structured note programmes.
- **Industry standard methodologies** – when exercising its discretion as calculation agent Bank D considers industry working group recommendations regarding credit adjustment spreads and seeks to apply the relevant recommended methodologies where appropriate.
- **Product governance** – Bank D and the Investment Managers (as distributors of the structured notes) assess applicable product governance obligations. In particular, consideration is given to: whether changing the reference benchmark modifies the characteristics of the structured notes; if the notes continue to meet the needs of the identified target market of end clients; and if any new potential conflicts of interest could arise.
- **Consent solicitation** – taking into account the characteristics of the note programme in question and the number of noteholders, Bank D and the Investment Managers consider the feasibility of consent solicitation in order to actively transition contracts to SONIA in advance of end-2021.
- **Mismatch identification** – Bank D seeks to identify where mismatches may arise between the timing and application of the structured note fallbacks and those of associated hedges in good time ahead of GBP LIBOR cessation and considers strategies to address such mismatches.
- **Distributor engagement and communications** – Bank D considers how to best engage with the Investment Manager as distributor of the structured notes and provides them with appropriate information on the impact of GBP LIBOR cessation on the notes. Bank D makes clear whether the information it is providing is intended for end-client use.
- **Record keeping** – Bank D and the Investment Manager retain appropriate records to demonstrate decision making based on information available at a particular point in the transition. This may be particularly relevant where decisions impact noteholders, for example where Bank D as calculation agent exercises its discretion in selecting a replacement rate.

## Contents

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

● [Case study 4](#)

[Glossary](#)



<b>ARRC</b>	Alternative Reference Rates Committee.
<b>bp</b>	Basis points.
<b>Dealer poll</b>	The process of finding a reference price for an asset by obtaining quotes from multiple dealers in that asset. Dealer polls also determine the value of a defaulted bond or loan following a credit event.
<b>Fallback</b>	Arrangement that will apply upon a trigger event, for example on the permanent discontinuance of LIBOR.
<b>FCA</b>	Financial Conduct Authority.
<b>FMSB</b>	FICC Markets Standards Board.
<b>GBP</b>	Great Britain Pound.
<b>ISDA</b>	The International Swaps and Derivatives Association.
<b>LIBOR</b>	London Inter-Bank Offered Rate.
<b>RFR</b>	Risk-free rate.
<b>SOFR</b>	Secured Overnight Financing Rate.
<b>SONIA</b>	Sterling Overnight Index Average.
<b>Sterling RFR WG</b>	The Working Group on Sterling Risk-Free Reference Rates
<b>USD</b>	United States Dollar.

[Contents](#)

[Introduction](#)

[Case studies](#)

[Case study 1\(a\)](#)

[Case study 1\(b\)](#)

[Case study 1\(c\)](#)

[Case study 2\(a\)](#)

[Case study 2\(b\)](#)

[Case study 3](#)

[Case study 4](#)

● [Glossary](#)

## End notes

1. [FCA announcement on future cessation and loss of representativeness of the LIBOR benchmarks, FCA, 5 March 2021](#)
2. On 27 July 2017, the Chief Executive of the UK FCA announced that the FCA did not intend to persuade or compel banks to submit rates for the calculation of LIBOR after 2021 ([see the Future of LIBOR, Andrew Bailey, FCA, 27 July 2017](#)).
3. [Active transition of GBP LIBOR referencing loans, The Working Group on Sterling Risk-Free Reference Rates, September 2020](#)
4. [Financial Service Regulation Statement, Rishi Sunak, June 2020](#)
5. [Draft Financial Services Bill, House of Commons, 21 October 2020](#)
6. Ibid 1
7. [Bowling out gracefully: LIBOR's retirement draws near, Andrew Hauser, Bank of England, 8 December 2020](#)
8. PRIN 2.1, [Principle 6 FCA Handbook](#)
9. A structured note is a debt obligation that also contains an embedded derivative component that adjusts the security's risk-return profile. The return performance of a structured note will track both the underlying debt obligation and the derivative embedded within it.

*luminous*

Design and production  
[www.luminous.co.uk](http://www.luminous.co.uk)