

**Thinking allowed** is a series that focuses on issues related to corporate reporting, whilst also providing insights and thought provoking commentary on a broad range of everyday matters that affect those preparing general purpose financial reports.

# Contents

<b>Introduction</b>	<b>4</b>
<b>Background</b>	<b>5</b>
<b>Impact on financial reporting under IFRS Standards</b>	<b>8</b>
What accounting issues could arise prior to the replacement of IBOR?	<b>10</b>
What accounting issues could arise at the point IBOR is replaced?	<b>16</b>
Derecognition assessment	<b>17</b>
Hedge accounting impact	<b>21</b>
<b>Preparing for transition</b>	<b>24</b>
<b>Final thoughts</b>	<b>25</b>

# Introduction

With significant changes to key interbank offered rates (IBORs) on the horizon, entities are beginning to plan for the transition, which in some jurisdictions will happen as soon as 2020. The move away from IBORs will impact risk management, financial reporting and other systems, processes and controls which needs to be understood so that appropriate action can be taken to mitigate any negative consequences. This publication provides a brief status update on IBOR replacement in some different jurisdictions but primarily focuses on some of the potential accounting consequences of the proposed IBOR replacement under International Financial Reporting Standards (IFRS Standards). The accounting impact of IBOR replacement is on the International Accounting Standard Board's (IASB) research agenda and is expected to move to its active standard-setting agenda in due course. The accounting consequences discussed in this publication are therefore of interest for standard setters, preparers, investors, analysts and auditors. Despite the transition to alternative nearly risk free rates (RFRs) being over a year away for most, the accounting issues that will need to be addressed have become clearer.

Depending on the specifics, these issues could have a significant impact on entities that are party to loans, deposits, bonds, debt securities, over the counter derivatives and exchange traded derivatives that reference an IBOR, particularly if these instruments are used in hedge relationships. The IBOR replacement will also affect discounted cash flow valuations of other financial and non-financial items used in accounting, such as for investment property, leasing, pension and insurance accounting to name a few. Without some standard setting to address these issues, in particular those relating to hedge accounting, the introduction of new IBORs could be very disruptive to financial reporting. Consequently the actions of the IASB are expected to be closely monitored in the coming months.

With significant changes to key interbank offered rates (IBORs) on the horizon, entities are beginning to plan for the transition, which in some jurisdictions will happen as soon as 2020.

# Background

IBORs have a key role in financial markets and underpin trillions of dollars in financial products. However, work is underway in multiple jurisdictions to transition to alternative RFRs as soon as 2020.

Several reasons have driven this move. Systemic risk concerns have been raised due to instances of fraudulent submissions and the underlying markets not being sufficiently active for some of the IBORs, together with the key reliance of financial transactions on these rates. Consequently, panel banks that provide submissions that contribute to IBOR are less comfortable providing those submissions when the volume of underlying transactions is low, due to potential litigation risks. All of these factors could, as seen before, lead to manipulation of rates and raise concerns over how these rates are determined in stressed market conditions.

Alternative RFRs have been, or are in the process of being, selected in key currency jurisdictions by working groups ("RFR Working Groups"), with the objective that such rates will be based on liquid underlying market transactions, and not dependent on submissions based on expert judgement. This will result in rates that are more reliable and provide a robust alternative for products and transactions that do not need to incorporate the credit risk premium embedded in the IBORs. The current status of some of the key IBOR alternatives stands as follows:

IBORs have a key role in financial markets and underpin trillions of dollars in financial products. However, work is underway in multiple jurisdictions to transition to alternative RFRs as soon as 2020.

Jurisdiction	Alternative RFR	Rate type	Rate administrator	Go live date	Key features
UK	Reformed Sterling Overnight Index Average ("SONIA")	Unsecured	Bank of England	23/04/2018	<ul style="list-style-type: none"> <li>Fully transaction-based rate, based on a functioning underlying market.</li> <li>Overnight, risk-free reference rate.</li> <li>Includes an expanded scope of transactions to incorporate overnight unsecured transactions negotiated bilaterally and those arranged with brokers.</li> <li>Includes a volume-weighted trimmed mean.</li> </ul>
US	Secured Overnight Financing Rate ("SOFR")	Secured	Federal Reserve Bank of New York	03/04/2018	<ul style="list-style-type: none"> <li>Fully transaction-based rate, based on a functioning underlying market.</li> <li>Overnight, risk-free reference rate that correlates closely with other money market rates.</li> <li>Covers multiple repo market segments, allowing for future market evolution.</li> </ul>
Europe	Euro Short Term Rate ("ESTER")	Unsecured	European Central Bank	By October 2019	<ul style="list-style-type: none"> <li>Reflects wholesale Euro unsecured overnight borrowing costs of Euro area banks.</li> <li>Will also replace EONIA but no replacement determined for EURIBOR.</li> <li>EU BMR authorisation deadline for EURIBOR on 1/1/2020.</li> </ul>

Jurisdiction	Alternative RFR	Rate type	Rate administrator	Go live date	Key features
Switzerland	Swiss Average Rate Overnight ("SARON")	Secured	Swiss National Bank and SIX Swiss Exchange	25/08/2009 (long history of publication)	<ul style="list-style-type: none"> <li>• Reflects interest paid on interbank overnight repos.</li> <li>• Became the reference interbank overnight repo on 25 August 2009.</li> </ul>
Japan	Tokyo Overnight Average Rate ("TONA")	Unsecured	Bank of Japan	01/11/1997 (long history of publication)	<ul style="list-style-type: none"> <li>• Fully transaction-based benchmark for the functioning uncollateralised overnight call rate market.</li> <li>• The Bank of Japan calculates and publishes the rate on a daily basis, using information provided by money market brokers (Tanshi).</li> <li>• An average, weighted by the volume of transactions corresponding to the rate.</li> </ul>

In this publication we use the term 'loans' to capture loans, deposits, bonds and debt securities. Notably, transitioning for bonds and debt securities may be more burdensome compared to loans given that in many cases consent of a qualifying number of bondholders is required to amend the terms of the security.

# Impact on financial reporting under IFRS Standards

The introduction of new RFRs could have far-reaching consequences for financial reporting. To date, many uncertainties remain because the way RFRs will be introduced into existing contractual arrangements, e.g. derivatives and debt, is not yet known. There are several initiatives ongoing to support a smooth transition to new rates by avoiding bilateral negotiations between contract parties (e.g. initiatives by the International Swaps and Derivatives Association (ISDA) and the European Central Bank (ECB) working groups). Undoubtedly the introduction of RFRs will vary across jurisdictions and contracts given many of the arrangements affected are bilateral and bespoke. Further, given RFRs are a key input in valuations more broadly, not just derivative and debt valuations, the accounting impact is not limited solely to financial instruments. This is particularly true for fair value measurement and present values determined using risk-free rates. Examples outside financial instruments could include valuation of investment property, impairment testing, pension and insurance contract accounting.

The accounting analysis in this section assumes that IBOR will be replaced by an alternative reference rate from 2021 and IBOR will no longer be a quoted rate from this point. We assumed this because this scenario is likely to have the greatest accounting impact<sup>1</sup>. Also, for the purpose of this analysis the replacement of a specific IBOR in a specific jurisdiction is not considered. Instead the analysis considers the generic replacement of IBOR for a new interest rate referred to below as ONIA (Overnight Interbank Average Rate).



<sup>1</sup> There are alternative potential scenarios in some jurisdictions, e.g. a new benchmark rate may be introduced but IBOR continues to be quoted, in which case the accounting issues identified may not arise or the accounting effects will be different.



The proposed replacement of IBOR poses a number of accounting issues, some of which could affect IFRS Standards reporters' financial statements issued prior to the actual replacement of IBOR. For example, a future expected replacement of IBOR could affect currently designated cash flow hedges that hedge IBOR cash flows beyond 2021.

Other accounting issues will apply from the point that the terms of financial instruments that contractually refer to IBOR are modified. For example, a derecognition assessment of a loan that is contractually linked to IBOR would only apply at the point that the loan is contractually modified.

#### **Valuation and accounting impacts**

IBOR rates are often a key component of the discount rate used by market participants in models to value both financial and non-financial items. Under IFRS Standards there are many different standards that use fair values based on these models or require fair value disclosures. IFRS 9 is a key standard that uses fair values for recognition and measurement of financial instruments with IFRS 7 *Financial Instruments: Disclosures* requiring fair value disclosures for many of the instruments not recognised at fair value on the balance sheet.

But the effect of a change in discount rates goes beyond these standards and is applicable for valuations other than fair value. For example, discounting is used to account for

- share based payments under IFRS 2;
- business combinations under IFRS 3;
- held for sale assets under IFRS 5;
- revenue under IFRS 15;
- leases under IFRS 16;
- insurance contracts under IFRS 17;
- pensions under IAS 19;
- impairment under IAS 36;
- property, plant and equipment at fair value under IAS 16;
- provisions under IAS 37;
- investment property under IAS 40;
- ...the list goes on!

The replacement of IBOR will not only affect the accounting under these standards due to a revised discount rate used in valuations, but it will also affect the accounting from any change to the terms of the contract being accounted for. For example, a change in the contractual interest rate on which lease payments are indexed would change the cash flows under the lease and require an adjustment to the amounts recognised under IFRS 16. Beyond the accounting, IFRS 13 also requires fair value disclosures for many assets and liabilities not measured at fair value on the balance sheet.

The replacement of IBOR with an alternative RFR will affect the inputs into models and the resulting valuations. Given that IBORs are generally still liquid and used by market participants in valuations, the use of discount rates based on IBOR in fair value calculations for financial reporting purposes is consistent with the principles of IFRS 13 which requires maximum use of observable market inputs. However, at some point the use of IBOR will become inappropriate if it is replaced as a benchmark and no longer used by market participants in observable market transactions. Therefore this change will need to be anticipated and appropriately planned for.

### Hedge Accounting

Under IFRS Standards, entities applying hedge accounting will apply either the hedge accounting requirements of IFRS 9 or IAS 39. The requirements in each standard are different in many important respects, however, for most of the issues described in this publication the requirements are generally the same. Consequently, the analysis in this paper does not distinguish between the requirements of each standard<sup>2</sup>.

Given the unique accounting challenges that the proposed replacement of IBOR poses, views are still in development. The IASB has begun a research project to explore the possible effects on financial reporting of IBOR reform. This research is on-going and at the time of writing the Board has yet to meet to discuss the output of that research.

Some of the accounting issues that we expect them to consider have been identified below along with our preliminary views on the potential accounting impacts. The issues that could affect current financial reporting prior to the replacement of IBOR are considered separately from the issues that could arise upon the actual replacement of IBOR.

### What accounting issues could arise prior to the replacement of IBOR?

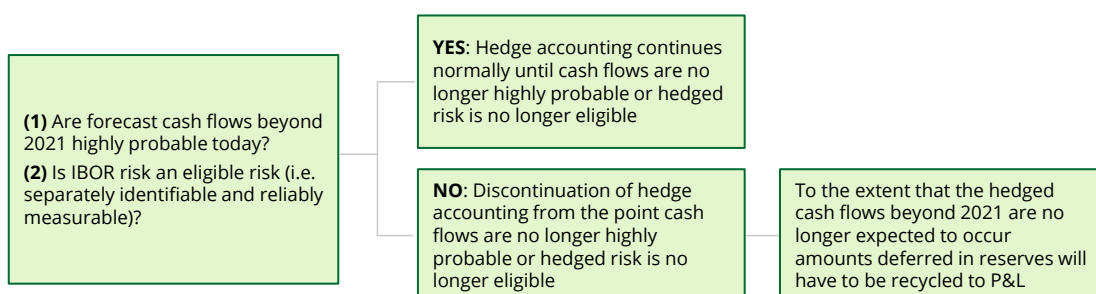
The key accounting issue that could arise prior to the replacement of IBOR relates to hedge accounting.

### Cash flow hedge accounting

Many entities use pay-fixed, receive IBOR interest rate swaps to hedge (i.e. fix) floating rate IBOR exposures on issued or forecast debt issuances. It is also common for entities to apply cash flow hedge accounting to defer gains/losses on those swaps in reserves to be recycled to profit or loss in the future to match the timing of recognition of the hedged variable cash flows (i.e. to effectively present interest at the hedged fixed rate in profit or loss). The time horizon of such hedges can vary but a significant number of entities will currently have cash flow hedges that designate IBOR cash flows beyond 2021, or have in the past designated such cash flow hedges and where derivative gains/losses remain deferred in reserves to be reclassified to profit or loss up to and beyond 2021 when the hedged IBOR cash flows are due to be recognised in profit or loss.

Under IFRS Standards, if the cash flows designated in a cash flow hedge are not highly probable, hedge accounting must cease, and if the cash flows previously hedged are no longer expected to occur, the amounts deferred in reserves in respect of those hedges must be immediately reclassified to profit or loss (because they are no longer expected to be matched in the future with the recognition of the hedged cash flows). Therefore a key question for hedges of future IBOR cash flows beyond 2021 is whether those cash flows are considered to be highly probable and/or expected to occur as at the reporting date (e.g. 31 December 2018).

### Cash flow hedge relationships



<sup>2</sup> In some circumstances the outcomes may differ because of differences between IFRS 9 and IAS 39 (e.g. different hedge effectiveness criteria and de-designation requirements, etc.)

Given the widespread application of cash flow hedge accounting for IBOR risk beyond 2021, discontinuation of hedge accounting and the reclassification of deferred gains/losses on such hedges would have a significant impact on financial reporting, impacting results and key accounting ratios for a number of financial and non-financial entities globally. Consequently, at each reporting date, including the upcoming 2018 reporting dates, careful consideration is required of whether the IBOR cash flows beyond 2021 designated in cash flow hedges are highly probable and/or expected to occur.

In addition, for a currently designated cash flow hedge to be eligible, the *hedged risk* is also required to be 'separately identifiable and reliably measurable' (discussed further below).

In summary:

For a cash flow hedge of IBOR beyond 2021 to be eligible:

(i) the designated *hedged cash flows* need to be *highly probable* [IAS 39:88(c) and IFRS 9:6.3.3], and

(ii) the designated *hedged risk* needs to be separately identifiable and reliably measurable [IAS 39:AG99F and IFRS 9:B6.3.8].

For amounts previously deferred in reserves to remain in the cash flow hedge reserve the hedged future IBOR cash flows must be *expected to occur*. If they are not, the amounts deferred in the cash flow hedge reserve must be immediately reclassified to profit or loss.

Although the *hedged cash flows* and the *hedged risk* sound like the same thing they can be different and given the IFRS Standards eligibility requirements for each are different (see summary box above) it is necessary to consider each separately when assessing cash flow hedges of IBOR beyond 2021.

Given the widespread application of cash flow hedge accounting for IBOR risk beyond 2021, discontinuation of hedge accounting and the reclassification of deferred gains/losses on such hedges would have a significant impact on financial reporting, impacting results and key accounting ratios for a number of financial and non-financial entities globally.

**Are the designated IBOR hedged cash flows beyond 2021 highly probable?**

Before considering this question it is necessary to consider the potential scenarios in which cash flow hedges of IBOR beyond 2021 can arise, for example:

Scenario	Description	Example	Designated cash flows
1	Cash flow hedge of issued IBOR debt where the contractual rate of interest is IBOR	Issued 3-month IBOR variable rate debt with a maturity of 2025	Contractually specified cash flows
2	Cash flow hedge of a highly probable forecast issuance/refinancing of IBOR debt	Forecast issuance/refinancing of 3-month IBOR variable rate debt in June 2019 with a term of 5 years	Highly probable forecast cash flows that become contractually specified IBOR cash flows
3	Cash flow hedge of a highly probable forecast issuance of fixed rate debt <sup>3</sup>	Forecast issuance of fixed rate debt to be issued in June 2019 with a term of 10 years	Highly probable forecast cash flows that become fixed cash flows (i.e. the actual cash flows never contractually reference IBOR)

In each scenario above the nature of the designated hedged cash flows is different. In Scenario 1, the cash flows contractually reference to IBOR. In Scenario 2 and 3 the cash flows are forecast cash flows that are designated on the basis that they will vary as IBOR varies (note in Scenario 3 the forecast cash flows vary only up until the fixed rate debt is issued from which point the contractual cash flows become fixed and therefore will no longer vary for changes in IBOR).

This highlights that under IFRS Standards, a cash flow hedge of interest rate risk can designate cash flows that are (i) contractually specified (as in Scenario 1); (ii) cash flows that are not contractually committed (as in Scenario 2 and 3); and (iii) cash flows that will never contractually reference IBOR, even after issuance (as in Scenario 3).

Furthermore, it should be noted that under Scenario 3 the amounts deferred in the cash flow hedge reserve in respect of the cash flows hedged for IBOR risk remain in reserves when the fixed rate debt is issued, despite the cash flows ceasing to vary for future changes in IBOR (i.e. up to the point the fixed rate debt is issued the forecast fixed cash flows vary due to IBOR and then from the point the fixed rate debt is issued the cash flows do not vary for changes in IBOR and the amounts deferred in reserves will be reclassified when the fixed contractual interest is accrued in profit or loss to effectively present the interest at the hedged rate).

Given the different nature of the hedged cash flows in the three scenarios above, the assessment of whether the hedged cash flows are highly probable is also different.

<sup>3</sup> Despite the debt to be issued being fixed rate debt, such a hedge is eligible for IBOR risk if IBOR is considered a separately identifiable and reliably measurable risk component of the future fixed rate debt, i.e. it can be reliably determined that a change in IBOR will result in a change in the forecast fixed rate on the debt.

In Scenario 1 the hedged cash flows are contractually linked to IBOR. Assuming that the contract does not allow for any change in the reference rate for the period of the debt, it may be easier to demonstrate that such cash flows are highly probable because they are contractually required to be paid. External factors may affect the ability of the parties to honour the contract and may cause the contract to be renegotiated but in the absence of such factors becoming more formal, at the time of writing, they are less likely to affect the highly probable assessment. If under Scenario 1 contractual terms of the loan allow or require the reference rate to change from IBOR to another rate (e.g. due to IBOR not being quoted by a sufficient number of banks), or the entity expects to renegotiate the terms of its loans that contractually reference IBOR, the issues considered for Scenario 2 regarding whether IBOR cash flows beyond 2021 continue to be considered highly probable will be relevant.

In Scenario 2 the hedged cash flows are purely forecast cash flows where a counterparty to the debt may not have even been identified. With the forecast replacement of IBOR, this is where the highly probable assessment could be the most critical and challenging.

Superficially one might conclude that because of the regulatory pressure for IBOR to be replaced by 2021 it is at least no longer highly probable that designated IBOR cash flows will occur beyond 2021. This view would raise the question of why, from a risk management perspective, entities continue to use IBOR interest rate swaps to hedge cash flows beyond 2021 and why IBOR interest rate curves and basis differentials referencing IBOR continue to be currently quoted for periods beyond 2021 and used in the pricing and valuation of interest rate swaps and other financial instruments. To explore this issue further it is necessary to consider how the replacement of IBOR with ONIA is expected to be implemented in a scenario where IBOR is no longer quoted and to consider the effect of this on currently designated hedges of IBOR (considered further below).

In Scenario 3, the potential replacement of IBOR with ONIA would likely not affect the probability of the fixed rate debt being issued in the future, i.e. forecast interest cash flows on the future fixed rate debt would, absent other factors, clearly remain highly probable given they do not reference IBOR. However, for this hedge to continue to be eligible it is necessary to demonstrate that the hedged risk (i.e. IBOR) remains 'separately identifiable and reliably measurable' for the term of the hedge. This criterion also applies to Scenario 1 and 2 and is considered separately below.

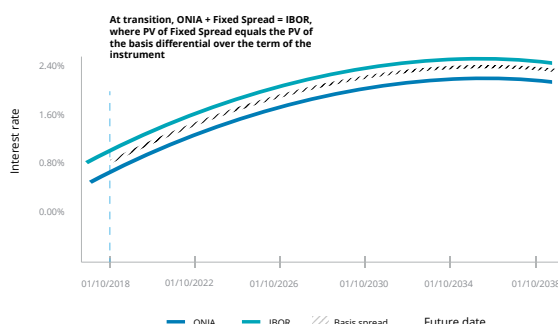
#### ***Current expectations of IBOR replacement in 2021***

One of the challenges with assessing whether designated IBOR cash flows beyond 2021 are highly probable (e.g. in Scenario 1 and 2 above) is the fact that the way RFRs will replace IBOR and be implemented into contracts by market participants is still emerging and at a different pace in each jurisdiction. Although there is some detail on what the new reference rates may be in certain jurisdictions, the precise transition arrangements are still unknown at the time of writing. Consequently, any assessment of whether IBOR cash flows beyond 2021 are highly probable must weigh the different possible outcomes and come to an informed judgement based on the information available for the specific jurisdiction concerned. This assessment must be performed at least at each reporting date, including interim reporting dates.

Without any evidence to the contrary it might seem reasonable at the present time to assume that any replacement of IBOR, enforced or voluntary, would be implemented on a fair basis where both payers and receivers of IBOR are dealt with equitably with no party to a contract set to gain over the other. With this in mind, if a replacement of IBOR for an alternative rate is expected in 2021, e.g. ONIA, an agreement to pay/receive IBOR would be replaced with an agreement to pay/receive 'ONIA + fixed spread'<sup>4</sup>, where the fixed spread is determined at the date of exchange to ensure that the present value of the original IBOR cash flows is equal to the present value of the 'ONIA + fixed spread' cash flows at the date of exchange.

<sup>4</sup> The spread is added to ONIA based on the assumption that the interest rate that replaces IBOR will have less credit risk than IBOR.

Put another way, the spread would be equal to the basis differential between IBOR and ONIA for the remaining term of the instrument, at the point of replacement. Because the spread is determined and fixed at the point of IBOR replacement, up until the actual replacement of IBOR, the spread would be variable such that the forecast 'ONIA + variable spread' cash flows would be equivalent to the hedged IBOR cash flows until the replacement of IBOR and the fixing of the spread between IBOR and ONIA. This is depicted below in the following graph.



If this assumption is reasonable, then it could be argued that up to 2021 (when IBOR is replaced by ONIA + fixed spread) forecast IBOR cash flows beyond 2021 continue to be highly probable, i.e. either IBOR cash flows will arise if the replacement does not go ahead in 2021 or 'ONIA + variable spread' cash flows will arise which will be equivalent to IBOR until the spread added to ONIA is fixed.

Under this view, only at the point IBOR is replaced by ONIA + fixed spread, would IBOR cash flows no longer be highly probable and therefore could no longer be the designated hedged risk in a cash flow hedge (assuming IBOR is no longer quoted from this point). This is because from this point the spread over ONIA is fixed and ONIA + fixed spread will no longer be equivalent to IBOR.

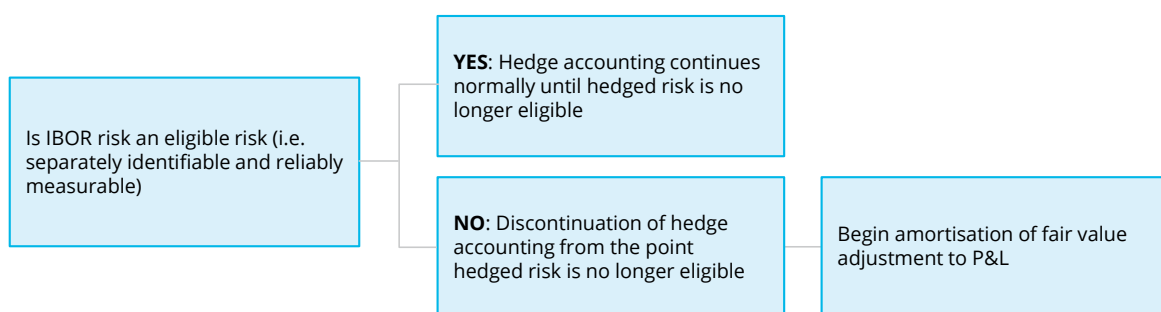
If the designated IBOR risk beyond 2021 was no longer quoted based on a liquid curve from a date *earlier* than 2021, the hedged IBOR cash flows may not be highly probable from that earlier date. In addition, if this did arise, the IBOR risk would unlikely represent an eligible *hedged risk* going forward as it would unlikely be 'separately identifiable and reliably measurable' (see below).

### ***Is the designated hedged risk separately identifiable and reliably measurable?***

As mentioned above, for the *hedged risk* to be eligible under IFRS Standards it must be 'separately identifiable and reliably measurable'. This condition is expected to be met when the hedged risk (e.g. 3m-IBOR) is contractually specified in the hedged item (e.g. a 3m-IBOR loan) and the risk variable (e.g. 3m-IBOR) is quoted based on a liquid curve.

When a hedged item is hedged for IBOR risk but IBOR is not contractually specified in the hedged item (e.g. a hedge of forecast cash flows on a future issuance of fixed rate debt) it is necessary to demonstrate that the IBOR risk is a 'separately identifiable and reliably measurable' risk component of the cash flows on the hedged item. Under IFRS Standards, quoted IBOR benchmarks based on liquid curves have been considered to represent risk components of future debt issuances of debt denominated in the same currency as the environment to which the IBOR relates, e.g. 3m-UK LIBOR is considered to represent a separately identifiable and reliably measurable risk component of forecast GBP debt issuances. This is because it can be observed that a change in 3m-UK LIBOR affects the fixed rate determined when the GBP debt is issued.

At the time of writing, the major IBOR benchmarks continue to be quoted based on liquid curves for future periods beyond 2021 and therefore in these cases the IBOR risk continues to be an eligible risk component. However, whether this will be the case for the whole period up to when IBOR is actually replaced remains to be seen and is a key issue that could affect the eligibility of hedges of IBOR risk, which includes fair value hedges discussed below.

**Fair value hedge accounting**

Under a fair value hedge of IBOR, fixed cash flows of the hedged item are designated for changes in fair value due to changes in IBOR. For example, the change in fair value of an issued fixed rate loan is hedged for changes in IBOR using a receive fixed, pay IBOR interest rate swap, where the change in fair value of the loan due to changes in IBOR is expected to be offset by a change in fair value of the swap.

Fair value hedges are different from cash flow hedges because the hedged item is always a contractual exposure, e.g. an issued fixed rate loan or a fixed rate loan commitment. Therefore, the issue of highly probable forecast cash flows does not arise. However, the issue of whether the designated IBOR risk is eligible, i.e. is 'separately identifiable and reliably measurable', is equally relevant for fair value hedges as it is for cash flow hedges. If IBOR risk is not considered to be a 'separately identifiable and reliably measurable' risk component of a currently designated hedged item in a fair value hedge, that hedge would no longer be eligible. Upon discontinuation of a fair value hedge of a hedged item for which the effective interest rate (EIR) is used, the EIR is required to be revised in order to amortise the fair value hedge adjustment recognised as part of the hedged item.

At the time of writing the major IBOR benchmarks continue to be quoted based on liquid curves for future periods beyond 2021 and therefore in these cases the IBOR risk continues to be an eligible risk component of fixed rate debt in the same currency. This is further supported by the fact that IBOR curves continue to be used in the valuation of fixed rate debt which is a basic principle of a fair value hedge, i.e. the hedged risk affects the fair value of the hedged item and this can be separately identified and reliably measured. However, how long this continues to be the case is a critical issue that requires monitoring.

### What accounting issues could arise at the point IBOR is replaced?

In the section above we considered the potential accounting impact of a forecast replacement of IBOR with an alternative reference rate. In contrast, this section considers the potential accounting impact at the point IBOR is replaced. In practice it may be that in some jurisdictions IBOR is not formally replaced but instead continues to be quoted but becomes less liquid because new loans and derivatives reference an alternative rate and certain existing loans and derivatives change from referencing IBOR to referencing an alternative rate. The accounting impacts will depend on the manner in which the move away from IBOR is implemented. Given the uncertainties, the analysis that follows assumes that IBOR is replaced and no longer quoted from 2021, and all derivatives and loans referencing IBOR are modified or exchanged at this date to link to a new reference rate. Under this scenario, at the point IBOR is formally replaced a number of different accounting issues will arise. For example, it will be necessary to consider:

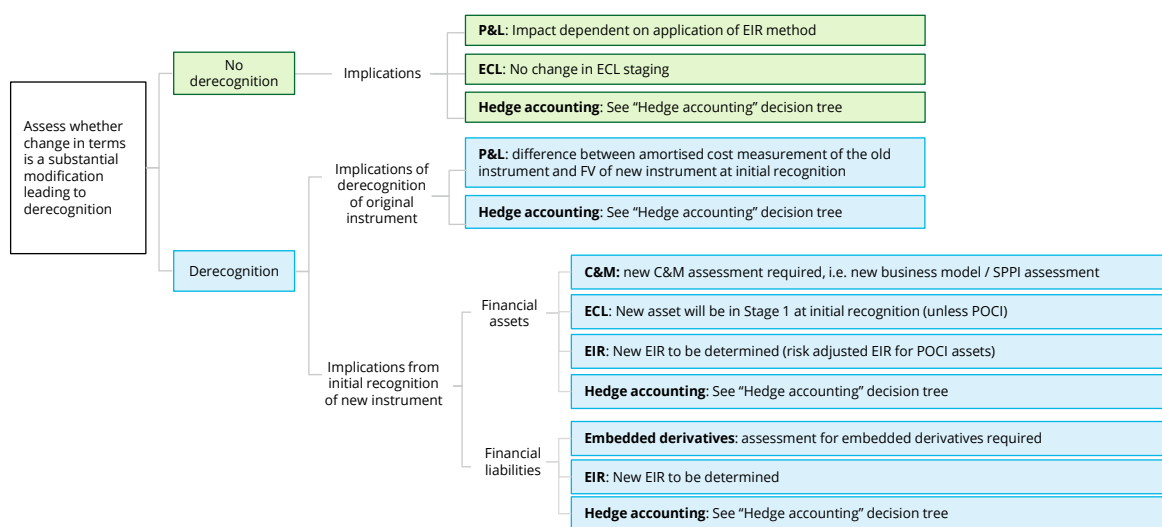
- Whether a change in interest rates from IBOR to a new reference rate results in derecognition of floating rate loans and derivatives referencing IBOR (e.g. interest rate swaps and cross-currency swaps).
- The accounting consequences of derecognising financial instruments that previously referenced IBOR and recognising new financial instruments that are linked to a new reference rate.
- How a change in reference rate should be accounted for under the effective interest rate method if the change in rate does not result in derecognition of a loan or derivative that previously referenced IBOR.
- Whether the changes to floating rate loans and derivatives that previously referenced IBOR results in discontinuation of any hedge relationship they are designated in.
- Whether, if a cash flow hedge is discontinued due to IBOR replacement in 2021, the associated gains/losses deferred in the cash flow hedge reserve are required to be reclassified to profit or loss immediately (i.e. whether the hedged cash flows are still expected to occur).
- Whether and how a change in reference rate will affect valuations of financial instruments and the accounting treatment of any change in value.

Each of these issues is considered below under the relevant headings.



## Derecognition assessment

### Amortised cost assets and liabilities and FVTOCI assets at floating rate<sup>(\*)</sup>



(\*) This decision tree ignores the accounting for any transaction costs.

FVTOCI: Fair Value Through Other Comprehensive Income

SPPI: Solely Payment of Principal and Interest

POCI: Purchased or Originated Credit Impaired

ECL: Expected Credit Loss

EIR: Effective Interest Rate

C&M: Classification and Measurement

When contracts that reference IBOR are changed to reference a new rate it will be necessary to first determine whether that change has arisen under the existing contractual terms of the instrument (e.g. the contract stipulates that if IBOR is no longer quoted an alternative rate will apply, these are often referred to as 'fallback provisions') or a modification of the contractual terms or replacement of the contract (e.g. the contract only contemplated paying/receiving IBOR interest and therefore requires modifying or replacing through agreement of both parties).

When the terms of an instrument allow for a replacement of IBOR as the reference rate the instrument would continue to be recognised because the contractual terms have not changed, i.e. the change in reference rates is under the existing terms of the instrument.

When the contractual terms of an instrument are modified, or the contract is replaced, that modification or exchange of instruments will need to be assessed to determine whether it is considered a 'new' instrument resulting in derecognition of the previous instrument that referenced IBOR.

Under IFRS 9 the guidance on assessing modifications and exchanges of financial liabilities is more detailed than that for financial assets, however in practice the guidance for financial liabilities is generally applied in a similar way for financial assets. The IFRS 9 guidance for financial liabilities requires derecognition of the original instrument if the new terms of the liability are substantially different from the original terms which is assessed qualitatively and/or quantitatively depending on the specific facts and circumstances [IFRS 9:3.3.2]. Under a quantitative assessment, the liability is derecognised if the present value of future cash flows (discounted using the original EIR) under the new terms differs by 10 per cent or more from the present value of the cash flows of the original liability [IFRS 9:B3.3.6].

This guidance does not directly apply to derivative instruments because the EIR does not apply to derivatives, however, the same principle of assessing whether there has been a 'substantial modification' would apply. In addition, a derivative which involves two-way payments between parties (e.g. interest rate swaps) should be derecognised only when it meets both the derecognition criteria for a financial asset and the derecognition criteria for a financial liability. The hedge accounting consequences of derecognising a derivative are considered in further detail below.

Whether the replacement of IBOR would result in a substantial modification of financial instruments leading to derecognition will depend on the specific facts and circumstances. The potential consequences of derecognition of the old instrument and recognition of a new instrument are considered below.

Should counterparties choose to change other terms in loans and derivatives at the same time as the reference rate is changed then the effect of all changes would need to be considered as part of a single assessment of whether there has been a substantial modification. The greater the impact of changes to the contractual terms the greater the likelihood the instrument will be derecognised.

***Consequences of initial recognition of a new instrument following modification or exchange of an instrument previously referencing IBOR***

If upon replacement of IBOR a financial instrument that previously referenced IBOR is derecognised, a number of potential accounting issues could arise. This could affect the accounting for loan assets, loan liabilities, derivative assets and derivative liabilities and also affect any hedge relationships that such instruments are designated in. The potential hedge accounting consequences are discussed separately below.

For derivatives not in hedge relationships, the impact of derecognition and re-recognition is limited because prior to derecognition, and after recognition, such derivatives would be measured at fair value through profit or loss (FVTPL). Therefore, with the exception of any potential day 1 gain/loss being deferred on initial recognition of certain derivatives deemed level 3 in IFRS 13 *Fair Value Measurement*, the derivatives will continue to be held at fair value with gains/losses recognised in profit or loss. This is the same treatment regardless of whether the change to the derivative's terms results in derecognition or not – i.e. the derivatives continue to be measured at FVTPL.

For loans the impact could be greater and, in part, depends on whether it is a loan asset or loan liability because the accounting considerations on initial recognition of a loan asset are different from those for a loan liability.

If the EIR method is applied to the newly recognised loan asset or liability (which is required for loan assets measured at amortised cost or fair value through other comprehensive income and for loan liabilities measured at amortised cost), initial recognition of a new loan will require determination of the EIR at initial recognition. This will require the determination of any transaction costs that should be capitalised on initial recognition and recognised in profit or loss under the EIR method. If the new EIR is different from the EIR on the original loan this will result in a change in interest income/expense.

For loans not measured at FVTPL prior to derecognition, the effect of derecognising the original loan and recognising a new loan at fair value would be to recognise a gain/loss in profit or loss for an amount equal to the difference between the previous carrying amount and the new carrying amount on initial recognition.

For loan liabilities not measured at FVTPL, the requirement to assess whether embedded derivatives, if any, need to be bifurcated would apply (as is always the case on initial recognition of a non-derivative financial liability not at FVTPL). The embedded derivative assessment does not apply to financial assets under IFRS 9.

Under IFRS 9, financial assets are classified based on whether their contractual cash flows are 'solely payments of principal and interest' and the business model within which the assets are held (i.e. held to collect, held to collect and sell, or other). These assessments would be required upon initial recognition and could potentially result in a different classification of the asset compared to the original asset. However, if the business model assessment is the same as when the original unmodified financial asset was first recognised, and the only change in the contract is the introduction of a new benchmark rate in the same currency denomination, then the classification of the new asset is likely to be the same as the old asset.

Initial recognition of financial assets and liabilities that are not required to be measured at FVTPL may be elected to be measured at FVTPL if the criteria for this option is met.

### ***Accounting for loans modified or exchanged but not derecognised***

When a loan asset or liability not at FVTPL is modified but not derecognised, IFRS 9 requires the cash flows of the modified loan to be discounted by the original EIR with any resulting gain/loss recognised in profit or loss [IFRS 9:5.4.3 and IFRS 9:B5.4.6]. In addition, any costs or fees incurred adjust the carrying amount of the modified loan and are amortised over the remaining term of the loan.

Where a floating rate instrument is modified or exchanged but remains a floating rate instrument, the question arises over what represents the 'original EIR'. For floating rate instruments under IFRS 9, re-estimation of the cash flows to reflect movements in market rates of interest alters the EIR. Consequently, it might be argued that a change in market rate of interest from 'IBOR + spread X' to 'ONIA + spread Y' reflects a movement in market rates of interest resulting in a change in EIR to 'ONIA + spread Y' at the point of modification or exchange<sup>5</sup>. Revising the EIR (to ONIA + spread Y) at the same time as the revision to the contractual rate of interest would result in no modification gain/loss. This treatment results in treating the change in interest rate on the loan (i.e. revision to ONIA + spread Y) as if it had arisen under the terms of the original loan (because the loan is a floating rate loan, when the market rate is revised, the EIR is revised). This view has merit if the only change to the spread is the basis difference between IBOR and ONIA; should the spread change because of other factors unrelated to this basis difference then it is questionable whether such an approach would be justified.

An alternative view might be that the change in rate to 'ONIA + spread Y' does not represent a change to a market rate of interest because this rate includes the original credit spread over IBOR which is not reset to a market credit spread (i.e. spread Y is determined such that 'ONIA + spread Y' equals 'IBOR + spread X' rather than being determined to be the current market credit spread over ONIA). In this case, given the lack of reset to a market rate of interest, the original EIR for the purpose of determining the modification gain/loss might be argued to be the rate applicable prior to the modification, i.e. 'IBOR + spread X'.

Under this approach the question arises over what the subsequent EIR would be. For example, using an EIR referencing IBOR would seem inappropriate for a loan linked to ONIA and also impractical if IBOR is no longer quoted. Instead of updating this rate for subsequent changes in IBOR it might be argued that it should be retained as a fixed rate. This would be akin to treating the floating rate loan as a fixed rate loan where the EIR remains fixed over the full term which would also seem inappropriate. Given these points it seems more appropriate to update the EIR to ONIA + spread Y at the point of modification with no modification gain/loss recognised. Given the guidance on modification accounting in IFRS 9 was not designed to cater for such a wholesale change in contracts, this may be one of the issues the IASB considers as part of its research project.

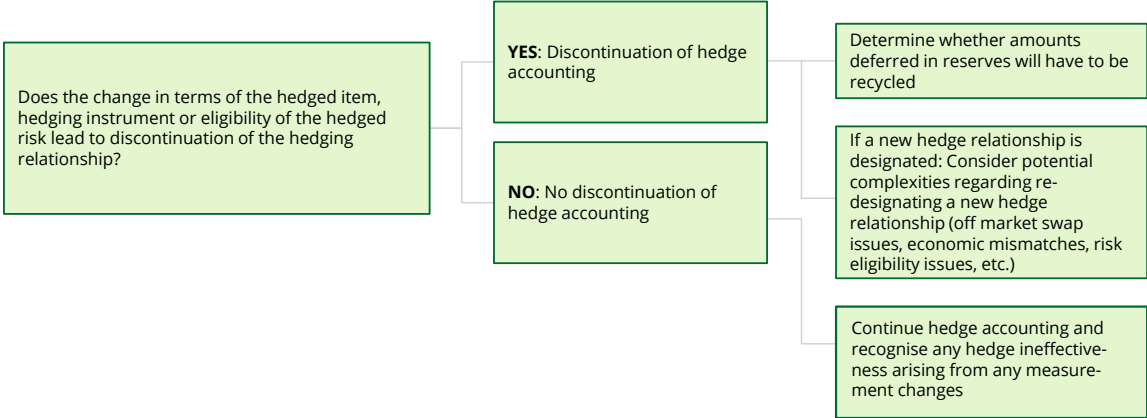
In addition a reassessment for embedded derivatives will be required if the change in terms of the contract significantly modifies the cash flows that would otherwise be required under the original contract (IFRS 9:B4.3.11). However, the likelihood of this requirement applying is low given that continued recognition of the loan implies that it has not been substantially modified.

<sup>5</sup> For an IBOR instrument issued with a spread, that spread is expected to be lower in value than the spread over ONIA because the credit risk in IBOR is expected to be greater than the credit risk in ONIA. Consequently, the fixed spread in the EIR for an IBOR instrument will be different from the fixed spread for the same instrument where IBOR is replaced with ONIA. The terms 'spread X' and 'spread Y' are used to denote this difference in spread.

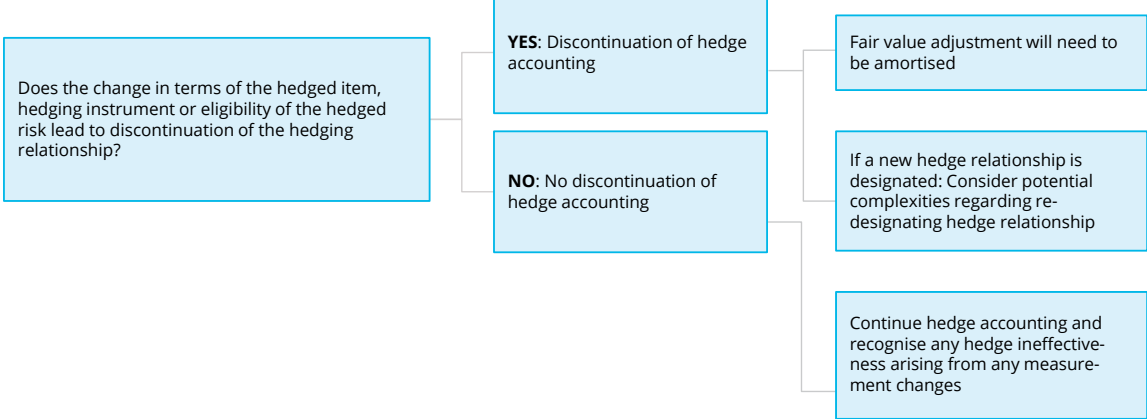
Hedge accounting impact

Where IBOR risk is designated in a cash flow or fair value hedge, the hedge accounting issues may arise before the actual replacement of IBOR (discussed above). And additional issues arise when IBOR is actually replaced. Again the accounting issues are more profound for cash flow hedges than for fair value hedges and each are considered in turn.

Cash flow hedge relationships



Fair value hedge relationships



### **Cash flow hedges**

The accounting impact on cash flow hedges will, in part, depend on the specific hedge designation and whether the hedged item (e.g. loan) or hedging instrument (e.g. derivative) are derecognised as a result of a modification of terms. It will also depend on how the replacement of IBOR is implemented and whether the replacement of IBOR happens at the same time for derivatives and non-derivatives designated in hedge relationships. We assume, for the purpose of this discussion, that the changes in the contract of the hedged item and hedging instrument occur at the same time given that we expect entities would make efforts to avoid significant basis risk that would arise should the contracts be changed at a different time. However, should this assumption not hold, additional complexities could arise.

Based on the current guidance in IFRS Standards, if the derivative instrument designated in a hedge is derecognised, this would result in discontinuation of the hedge relationship, unless the replacement by the new derivative is considered to be part of 'the entity's documented hedging strategy' [IFRS 9:6.5.6 and IAS 39:101]. Whether the replacement could be considered as forming part of 'the entity's documented hedging strategy' would depend on the specific facts and circumstances. Assuming a worst case scenario that the new derivative is not considered part of the documented hedging strategy, the hedge accounting relationship would have to be discontinued at the point the derivative is derecognised and for hedge accounting to apply subsequently, the new derivative would have to be designated in a new hedge accounting relationship. Where the new derivative is off-market this would likely result in subsequent hedge ineffectiveness, the significance of which would depend on the specific facts and circumstances.

Whether the derecognition of the hedged item (e.g. a loan asset or liability) and recognition of a new hedged item would affect a hedge relationship would depend on the specifics of the hedge designation and whether the new hedged item and the new hedged risk (i.e. ONIA) would be captured by the entity's original hedge designation. Again, given the early stage and uncertainties of the implementation of IBOR replacement and the entity specifics of hedge documentation it is not possible to be conclusive on the accounting impact.

Regardless of the derecognition conclusion for the hedging instrument or hedged item the more significant issue for cash flow hedges at the point of IBOR replacement will be whether the original hedged cash flows continue to be 'expected to occur'. The answer to this question is linked to the analysis above regarding whether IBOR cash flows beyond 2021 are highly probable if IBOR is expected to be replaced by ONIA.

As the date of IBOR replacement approaches, if it is successfully argued that the IBOR cash flows beyond 2021 are still expected to occur (on the basis that at the point of replacement, the forecast cash flows (ONIA + fixed spread) will be equivalent in amount to IBOR cash flows), then the amounts deferred in the cash flow hedge reserve up to the point of replacement will remain in reserves and will be reclassified to profit or loss when those ONIA + fixed spread interest cash flows affect profit or loss. This might not appear intuitive given that the cash flows from 2021 reference ONIA instead of IBOR, but if those ONIA + fixed spread cash flows are considered to have varied for changes in IBOR up to the point the spread over ONIA is fixed, then the amounts deferred in reserves should be matched in the future with those interest cash flows. The logic of this is the same as for a hedge of a forecast issuance of a fixed rate debt (i.e. Scenario 3 above). If the future cash flows on the IBOR exposure beyond 2021 varied for changes in IBOR until the reference rate changed it follows that the amounts deferred in reserves in respect of that hedge should be reclassified to profit or loss when those cash flows are recognised in profit or loss.

On the other hand, if it cannot be argued that the original hedged IBOR cash flows beyond 2021 are expected to occur, amounts deferred in reserves will be immediately reclassified to profit or loss which could occur before the actual replacement of IBOR (as discussed above). How long before the actual replacement of IBOR this reclassification could be triggered would depend on exactly when the hedged IBOR cash flows became “no longer expected to occur” (e.g. this could be a year before the actual replacement of IBOR). If this is the conclusion reached, this would represent a significant issue for the IASB to consider as part of its research project.






#### ***Fair value hedges***

Where the hedged item is a fixed rate loan or fixed rate loan commitment, the replacement of IBOR will not affect the cash flows of the hedged item (i.e. the interest cash flows will remain fixed). However, the hedged risk will need to be changed if IBOR risk is no longer considered ‘separately identifiable and reliably measurable’ rendering it an ineligible hedged risk (see above). If an entity wished to apply hedge accounting for the same hedged item but with a modified or exchanged derivative that references ONIA instead of IBOR, and designate ONIA as the hedged risk, the question would arise as to whether this can be done under the original hedge designation. This depends on a number of factors including the specific hedge documentation, the interpretation of the hedge accounting requirements regarding discontinuation and any potential amendments to IFRS Standards that could be made in advance of the replacement of IBOR. Consequently, it is not possible to be conclusive on this matter. Assuming that hedge accounting would have to be discontinued upon a change in hedged risk, the EIR of the loan asset or liability would have to be updated to effectively amortise the hedge adjustment. However, if hedge accounting is resumed for a hedge of ONIA, the use of an off-market derivative may result in complications in respect of amortising the hedge adjustment.

If hedge accounting is applied for the remaining term of the hedged item, the total cumulative fair value hedge adjustments posted to the hedged item under the old and new hedge would need to be recognised in profit or loss by the maturity of the hedged item. To the extent that the hedge adjustments are not naturally reversed through profit or loss through the continued application of fair value hedge accounting, the hedge adjustment will need to be amortised to profit or loss over the term of the hedge to avoid a one-off gain/loss from derecognising the accumulated hedge adjustment at maturity of the hedged item.

# Preparing for transition

Although the transition from IBOR is a few years away, as noted above, the financial reporting implications are relevant for periods prior to IBOR being replaced. The replacement of IBORs will have a major impact on financial products being offered and the risk management approaches adopted by financial institutions and corporate treasury. It is important that market participants identify and analyse the potential impact of IBOR reform now and put in place an IBOR transition plan. We have set out below an overview of the key activities and considerations that we recommend entities undertake in planning their transition from IBOR, of which the financial reporting impact is only one.

Area	Key Activities	Key Considerations
 <b>Identifying and measuring IBOR exposure</b>	Undertake an impact assessment of the current exposure to IBOR to identify the exposure quantum, raise awareness of the transition impact and prioritise practical next steps.	<ul style="list-style-type: none"> <li>• Include all external and internal borrowing and funding commitments, derivatives, cash pooling, leases and other contracts or models that reference IBOR, assessing the spreads and maturities.</li> </ul>
 <b>Re-papering/ Re-contracting</b>	Review documentation to identify any fall back provisions or any contractual terms that may provide for transition.	<ul style="list-style-type: none"> <li>• Engage early in understanding the potential impact on contracts and plan accordingly changes to existing contracts. It is important to include any intercompany arrangements in this assessment.</li> <li>• Future-proof new contracts by considering the wording of any contracts entered into. Prepare fall back provisions in all new contracts referencing IBOR e.g. lenders may be willing to include language that states a new replacement index will be agreed by the borrower and lender.</li> </ul>
 <b>Economics</b>	Understand the impact the new RFR will have on contract risks and cash flows and consider the impact on funding and hedging strategies as well as key reporting metrics and key ratios.	<ul style="list-style-type: none"> <li>• Consider whether moving contracts to the replacement RFR requires a change in funding or hedging strategies, what these might be and analyse the potential knock-on impact on key reporting metrics and key ratios.</li> <li>• The new RFR may not be consistently adopted across all types of financial contracts and therefore an economic mismatch could arise between a derivative and the underlying hedged exposure.</li> </ul>
 <b>Financial reporting</b>	Understand the impact that the new RFR will have on financial reporting.	<ul style="list-style-type: none"> <li>• Accountants, treasurers and policy teams will need to engage to assess whether the modification of contractual terms will imply derecognition or not as well as the potential consequences for hedge accounting, including being able to apply hedge accounting today.</li> </ul>
 <b>Systems, processes and controls</b>	The transition may necessitate changes to a swathe of internal systems, processes and controls.	<ul style="list-style-type: none"> <li>• Identify all processes, systems and controls impacted by the change e.g. systems may need to be updated with the new RFR curves for trade execution, capture, settlement, valuation and hedge accounting. This will have implications for the associated processes and controls and may introduce new risks.</li> <li>• Any internal models that use IBOR as an assumption will also need to be updated for the replacement RFR.</li> </ul>



# Final thoughts

The above preliminary analysis only touches on some of the key areas of accounting that will be affected by the replacement of IBOR. As time passes and further details emerge, more issues are likely to be identified and jurisdictional differences are likely to complicate matters further. The acceptance of new reference rates in practice and the output from the IASB's research project on the replacement of IBOR will also need to be considered as part of any accounting conclusions reached. Consequently, further updates to the accounting analysis in this publication should be expected.

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# Notes





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