MACQUARIE

IBOR transition

Frequently asked questions

OCTOBER 2019

Some of the most important numbers in global financial markets are changing. For Macquarie, it's important that our clients, counterparties, investors and other stakeholders understand what financial benchmark rate reform is and what it means for them, Macquarie and financial markets more broadly.

About this note

This note provides an overview of:

- What are IBOR?
- Why are IBOR reforms taking place?
- What are the new alternative rates?
- The timeframe for transition
- How the transition is likely to happen
- The key risks and operational challenges
- How Macquarie is approaching the transition
- What you can do to prepare for transition

Further information

If you need further information, please refer to the "Further information" section at the end of this note.

Glossary

A glossary of key terms is provided at the end of this note.

What are IBOR?

- IBOR, including BBSW, EURIBOR, LIBOR and TIBOR, are interest rate benchmarks that have been used in a wide variety of financial instruments for decades.
- LIBOR is the most widely used interest rate benchmark in financial markets, estimated to be referenced in over $US200 trillion of financial products, including bonds, derivatives and loans.
- IBOR are designed to reflect the price of interbank funding markets. Each IBOR is published daily across a variety of currencies and tenors (e.g. overnight, one-week, three-month, six-month), and predominantly based on submissions by a panel of banks.

Why are IBOR reforms taking place?

- Over time, changes in interbank funding markets have meant that IBOR panel bank submissions were based less on observable transactions, and more on expert judgment.
- Financial markets regulatory authorities reviewed what these changes meant for financial stability, and in 2013 published recommendations to reform major interest rate benchmarks.[i] These recommendations included best practice principles for financial benchmarks, measures to strengthen existing benchmarks and plans to develop alternative reference rates.
- As a result of these recommendations, many IBOR around the world are undergoing reforms and some, including LIBOR, are being replaced with alternative reference rates (ARR). This note is primarily concerned with the replacement of LIBOR.

What does the replacement of LIBOR entail?

- The replacement of LIBOR is a significant undertaking for financial markets participants. LIBOR is being phased out and replaced by ARR.
- The UK's Financial Conduct Authority, the regulator of LIBOR, has indicated its expectation that publication of LIBOR is likely to cease at the end of 2021 and that all institutions should end their reliance on LIBOR by that time.[ii]

The alternative reference rates replacing LIBOR

- National working groups for each of the five LIBOR currencies have identified alternative, transaction-based, and robust benchmarks. Regulators have endorsed the following alternative reference rates:

LIBOR	ARR
CHF	SARON - Swiss Average Rate Overnight
EUR	€STR - Euro Short-Term Rate
GBP	SONIA - Reformed Sterling Overnight Index Average
USD	SOFR - Secured Overnight Financing Rate
YEN	TONAR - Tokyo Overnight Average Rate

Why is the LIBOR replacement important for clients, counterparties, investors and other stakeholders?

- While LIBOR publication may cease at the end of 2021, it is important for clients, counterparties, investors and other stakeholders to develop an understanding of what the transition from LIBOR to ARR means now.
- As the industry considers how and when it will transition to ARR, it is important to note that the timing of changes may vary based on the currencies, products and participants involved. As a result, early action, to prepare and understand LIBOR exposure, is recommended by regulators for financial markets participants.

How do the alternative reference rates compare to LIBOR?

- There are two key differences between LIBOR and the nominated ARR that have implications for financial markets:
  1. LIBOR includes a component of bank credit risk, whereas the ARR are largely risk-free rates.
  2. LIBOR today are published over various tenors – overnight, 1 month, 3-month, 6-month etc, whereas the ARR are currently overnight rates only. At this time, it is unclear whether term-ARR could be derived that would have a similar tenor to existing LIBOR.
- Because of these differences, there is a potential economic impact for parties to LIBOR-related contracts when they transition from using LIBOR to using an ARR.

What is the timeframe for transition from LIBOR to ARR?

- We know that the future of LIBOR beyond 2021 is uncertain as the FCA plans not to compel LIBOR panel banks to make submissions beyond the end of 2021.
- The pace of transition from LIBOR to ARR depends upon many variables including the readiness of market infrastructure, systems and documentation, and the rate that market participants start using financial instruments referencing ARR instead of LIBOR.
- Markets may transition before 2021, and different currencies and financial products are likely to move at different speeds.
- Reform efforts are being globally coordinated, and regulators are becoming increasingly focused on market participants preparing themselves for transition. There has been an increase in transition activity amongst banks and other market participants that is likely to accelerate the pace of transition.

How is the transition likely to happen?

- National working groups, industry associations (such as ISDA) and regulators (such as a central banks) are working together to drive the necessary market changes. Examples include standardising terms for documentation and clearing house readiness to settle derivatives referencing ARR. It is estimated that over 80% of global LIBOR notional exposures are derivatives,[iii] and therefore ISDA is playing a leading role.
- After developing new industry-wide conventions and market protocols, these groups are consulting broadly with market participants as a high degree of market consensus is likely to improve the rate of ARR adoption and reduce transition risks and challenges.
- There are three main categories of transactions impacted by the transition:
  1. **New transactions referencing ARR:** the volume of these transactions is expected to increase as market infrastructure becomes ready and their usage increases.
  2. **Existing transactions referencing LIBOR with a legal maturity beyond the end of 2021:** Most existing transactions include provisions that deal with LIBOR not being available (commonly referred to as “fallback” language). However, these provisions were typically designed to address a temporary disruption to LIBOR rather than a permanent cessation. Therefore, these transactions are expected to be amended to improve fallback provisions, or ideally migrate to new ARR before the end of 2021. These contract amendments are also likely to include changes in interest rate terms and credit spreads to account for the key differences between ARR and LIBOR outlined previously in the section “How do the alternative reference rates compare to LIBOR?”
  3. **New transactions referencing LIBOR with a legal maturity beyond the end of 2021:** As liquidity in some ARR has yet to fully develop, parties will continue to enter into new transactions that reference LIBOR. The volume of these transactions is expected to decrease as the usage of ARR increases. Parties to these transactions should understand the risks of transition and incorporate appropriate contractual terms (such as fallback language to deal with LIBOR cessation).

What are the key risks of transitioning from LIBOR to ARR?

- The transition is more than a regulatory driven change, it involves fundamental changes in market behaviours and conventions led by market participants. Because LIBOR has been the most widely used interest rate benchmark in the world for decades, transition to ARR is complex, both for Macquarie and many of our clients and counterparties.
- The key risks related to the transition may include:
  - risks from terms in existing contracts that reference LIBOR beyond 2021 not functioning as the parties intended.
  - the potential economic impact from the repricing of contracts for the differences between LIBOR and ARR (i.e. credit spread and tenor adjustments).
  - potential differences in hedge accounting treatment if cash products and derivatives become misaligned.
  - operational risks arising from the transition.

What are the main operational challenges of transitioning from LIBOR to ARR?

- Because LIBOR has been used for decades it is deeply embedded in many systems and processes across financial markets.
- Operational challenges for transition in those markets may include:
  - many contracts will need to be amended. The complexity of that process will depend on the nature of the contracts which need to be revised.
  - pricing, valuation and risk management models that currently use LIBOR, will need to be updated, tested and validated.
  - operational systems, may need to be updated to support ARR products (and will likely need to accommodate both LIBOR and ARR products during transition).
  - processes and policies may need to be updated for ARR e.g. transfer pricing, interest rate hedging, hedge accounting policy.

What can you do to prepare?

- Macquarie is preparing for the LIBOR transition and we encourage our clients, counterparties, investors and other stakeholders to do so as well.
- As a client or counterparty of Macquarie, it is important that you are aware of what the change from LIBOR to ARR might mean for you, including whether you require guidance or support from professional advisers.
- Preparation may include, understanding:
  - your exposures to LIBOR and how existing transactions may behave if reliance on LIBOR is phased out or LIBOR publication ceases, including the risks involved in continuing to use LIBOR in new transactions.
  - actions required to ensure your readiness and limit any impacts and risks of the LIBOR transition.
  - the differences between LIBOR references today and the proposed ARR replacement.
  - other impacts that the transition from LIBOR to ARR may have on your business.
- The financial services sector continues to work through certain aspects of the LIBOR transition and the functioning of new markets and products. Please visit macquarie.com/ibor for other information, including links to external sources to find further information on market developments.

What other IBOR reforms are taking place?

- Beyond LIBOR, many other IBOR are undergoing reforms, including BBSW and EURIBOR. You might also seek to understand the potential impacts and risks relating to these reforms.
- BBSW, the most commonly used IBOR for AUD, is administered by the ASX and regulated by ASIC. BBSW has been reformed and is expected to continue alongside the nominated ARR for AUD being the RBA Cash Rate (also known as “AONIA”).[iv]
- EURIBOR is administered by EMMI and regulated by the ECB. The calculation methodology for EURIBOR is being reformed such that EURIBOR is expected to continue alongside the nominated ARR for EUR being €STR.[v]
- Notwithstanding that BBSW and EURIBOR are likely to continue, they are potentially subject to the same type of discontinuation risk as other global IBOR. Therefore, the fallback language in contracts that reference these IBOR should be reviewed and amended if necessary.

What does the change mean for Macquarie?

- As a diversified financial group, with a variety of global products and services, the transition from LIBOR to ARR and other IBOR reforms are important changes for us.
- To ensure we are well prepared, we are conducting a detailed analysis of our use of LIBOR rates. This includes a review of LIBOR references within legal agreements, systems, models and processes. We are developing plans to manage the related impacts and risks of transition, including how we meet the needs of our clients as ARR usage increases and where direct engagement on existing transactions, agreements and arrangements might be required.

Further information

- For more information, please get in touch with your usual Macquarie contact.
- As further details of the transition arrangements emerge, we will update stakeholder-facing staff with guidance.
- Please visit macquarie.com/ibor for other information, including links to external sources to find further information on market developments.
- For enquiries at the Macquarie Group or Macquarie Bank level, or for regulatory or sectoral input, please contact our Global IBOR Transition team: IBOR@macquarie.com

Glossary

ARR:	Alternative Reference Rates
ASX:	Australian Stock Exchange
ASIC:	Australian Securities and Investment Commission
BOE:	Bank of England
BOJ:	Bank of Japan
ECB:	European Central Bank
EMMI:	European Money Markets Institute
EURIBOR:	Euro Interbank Offered Rate
FCA:	Financial Conduct Authority (UK)
IBOR:	Interbank Offered Rate
ISDA:	International Swaps and Derivatives Association
LIBOR:	London Interbank Offered Rate
RBA:	Reserve Bank of Australia

Endnotes

i. https://www.fsb.org/work-of-the-fsb/policy-development/additional-policy-areas/financial-benchmarks/

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

iii. https://www.newyorkfed.org/medialibrary/Microsites/arrc/files/2018/ARRC-Second-report

iv. https://www.rba.gov.au/mkt-operations/resources/interest-rate-benchmark-reform.html

v. https://www.emmi-benchmarks.eu/euribor-org/about-euribor.html