Dear Laurence,

Implementation of risk free rates and transition away from LIBOR: Key issues for the global financial markets

Following the speech by Andrew Bailey, Chief Executive of the Financial Conduct Authority ("FCA"), on 27 July 2017 about the future of LIBOR, the following trade associations, which represent different product areas across the global financial markets, have been working together to discuss the key issues involved in any transition away from LIBOR to near risk free rates ("RFRs") and a potential way forward:

- Association of Corporate Treasurers (ACT)
- Association for Financial Markets in Europe (AFME)
- Asia-Pacific Loan Market Association (APLMA)
- Global Financial Markets Association (GFMA)
- International Capital Markets Association (ICMA)
- International Capital Market Services Association (ICMSA)
- International Swaps and Derivatives Association (ISDA)
- Japan Syndication and Loan-Trading Association (JSLA)
- Loan Market Association (LMA)
- Loan Syndications and Trading Association (LSTA)
Individual trade associations have also been in direct discussions with the relevant regulators on the key issues for the product areas in the financial markets which they represent (including the derivatives market, the syndicated loan market, the bond market, the securitisation market, as well as corporate end-users of these products). In this respect, it is encouraging to see the work that has been undertaken, and the announcements that have been made, by the regulators in the different LIBOR currency jurisdictions around the increased scope of certain existing working groups and the setting up of various sub-groups to assess the viability of creating term reference rates and exploring the impacts of a transition from LIBOR on product areas that would be most affected by the transition.

Given the global nature of the LIBOR benchmark, any transition away from LIBOR would raise similar challenges across the different currencies for which it is currently quoted. As the transition is being dealt with by different working groups in different jurisdictions, we thought it might be helpful, in order to assist the work of the Financial Stability Board ("FSB") and the various national regulators on the global coordination of this transition, to outline in one place some of the key issues that may arise from any transition from LIBOR to the various RFRs identified in the relevant LIBOR currency jurisdictions for non-derivative products. These are set out in Appendix 1 to this letter and seek to cover the most important issues that face the syndicated loan, bond and securitisations markets, as well as corporate end-users of these products. Given the focus on corporate end-users, we thought it would also be helpful to include in one place a list of use cases for LIBOR by corporates. This is set out in Appendix 2 to this letter.

We have focused on non-derivative products in this letter given that ISDA has already outlined the transition issues for derivatives with the regulatory community.

We would appreciate it if you could share this letter with members of the Official Sector Steering Group. We hope that this is a helpful addition to the work already being carried out by the FSB, the national regulators and the various currency working groups by providing a reference point of the issues arising across the different financial markets and currencies in one document.

We look forward to continuing our engagement with the regulatory community on the transition and would be very pleased to discuss any aspect of this letter with you in more detail. Please do not hesitate to contact us, either via Clare Dawson by email at clare.dawson@lma.eu.com or on +44 (0)20 7006 6007, or through your usual contacts at the relevant trade associations.

Yours faithfully,

Caroline Stockmann
Chief Executive, Association of Corporate Treasurers

Richard Hopkin
Managing Director, Association for Financial Markets in Europe
Janet Field  
Managing Director, Asia-Pacific Loan Market Association

Martin Scheck  
Chief Executive, International Capital Markets Association

Robert A. King  
Chairman, International Capital Market Services Association

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Japan Syndication and Loan-Trading Association

Clare Dawson  
Chief Executive, Loan Market Association

Lee Shaiman  
Executive Director, Loan Syndications and Trading Association

Chris Killian  
Securities Industry and Financial Markets Association
Appendix 1

Issues to be considered for non-derivative products of a transition from LIBOR to RFRs

1. Scope of adoption of alternative rates

- Current RFR initiatives have primarily focused on the derivatives market (understandably, due to the exposure of that market to LIBOR relative to other markets). Given the inter-relationship of derivatives with the underlying obligations being hedged, it is important that work is not carried out in isolated product areas and that the interests of other product areas are adequately represented. In this respect, it is encouraging to see the involvement of our respective associations in certain of the national currency working groups.

- Inconsistency in the choice of RFRs across jurisdictions, particularly as to whether the RFR is secured or unsecured, could cause issues. For example, in the loan market, drawings in different LIBOR currencies under the same facility are priced at the same margin. Different approaches to different currencies that result in a different economic effect could be operationally intensive as this would require different margins per currency.

- Publication times for different rates would vary across currencies. Changes to methodology would cause significant operational disruption and challenges for existing IT infrastructure.

- Basis risk and impact on liquidity will also be key issues, particularly if the alternative benchmarks chosen by the market for derivatives and their underlying obligations are different. Different approaches could lead to inconsistency and less liquidity.

- It is unclear at this stage whether a fixed spread can be added to alternative benchmark rates to make them equivalent to LIBOR (particularly where the alternative rate is a secured rate, whereas LIBOR is an unsecured rate). In order to avoid a value shift, there needs to be a mechanism for incorporating a term bank credit risk component.

- Although the adoption of alternative benchmarks will need to be market-led, the market will require reassurance that industry wide discussions can take place. Regulators will be key in facilitating integration and coordination to minimise fragmentation and basis risk.

- There is a significant risk that in the absence of suitable benchmarks for use in the cash markets there could be increased costs for funders and/or a reduction in funding available to the corporate sector.

- Whilst interest rates are low, interest rate risk is relatively low. As rates rise, this risk becomes more material in the real economy. Disincentivising risk management may be one unintended consequence of a move away from LIBOR.

2. The need for a term rate

- LIBOR is a forward-looking term rate with the rate fixed at the start, rather than the end, of the interest period. The various RFRs proposed are overnight rates.

- Certainty of cash flow is key to both borrowers / issuers and lenders / investors. A forward-looking term rate with front-end fixing provides certainty to borrowers / issuers and lenders / investors (since payments are known in advance). This would not be the case with backward-looking overnight rates.

- Tradeable instruments, such as bonds, are traded on the basis of known interest payments at the next interest payment date. If the rate is not fixed at the start of an interest period, it is unclear how a floating rate note could be traded effectively without some form of daily computation solution that does not currently exist.
In addition, in relation to loan products, a backward-looking rate would cause undue complexity as the administration of a daily fluctuating rate is not currently supported by loan product systems used by most lenders in the syndicated loan market. This would require a manual process, which is operationally intensive and difficult to verify.

Computation of daily averages based on overnight rates for a specific period would also be problematic operationally for the loan market and would require an automated solution that does not currently exist.

Interest payments on loans and bonds are made at less frequent intervals (typically a 1-, 3- and 6-month basis). Multiple term options would be needed to compensate lenders for making longer-term funds available and necessary for operational continuity.

Work on, and consideration given to, the creation of term RFRs currently seems to be inconsistent across the various currency working groups. We appreciate that this might not actually be the case, however, this is the perception based on publicly available information. It would be helpful for any work on term RFRs to be communicated to the financial markets, particularly anticipated timelines.

3. Template documentation

Industry template documentation for syndicated loans is based on a LIBOR term benchmark, with interest being calculated on the basis of LIBOR plus a margin. Amendment of template documentation will not simply be a case of slotting in a new benchmark given that documentation is based on LIBOR representing a lender's cost of funds, and the mechanics of operating the loan – e.g. timelines for utilisation – are based on the assumption that LIBOR is being used.

The bond market does not have a standard set of industry template documentation. Bond terms and conditions are produced to meet the needs of the particular issuer and investors for a specific product. Broadly, there are two forms of mechanic used in the market for plain vanilla floating rate notes (screen rate determination and ISDA determination), both of which are based upon a LIBOR term benchmark. As with the loan market, amending these provisions will not be as simple as slotting in a new benchmark, particularly if the new benchmark is based upon a different premise to LIBOR (e.g. a risk free rate without a forward-looking term structure).

Template documentation cannot be amended until an appropriate alternative rate has been identified and has market acceptance. In this respect, it is noted that some rates are not yet in existence (e.g. the Secured Overnight Financing Rate in the US) or are undergoing reform (SONIA in the UK).

4. Legacy transactions

Whilst fallbacks are contained in existing documentation should a benchmark become unavailable, these are unlikely to be sustainable in the long-term. For example, the ultimate fallback in loan agreements is to an individual lender's cost of funds and the majority of floating rate notes ultimately fall back to a fixed rate at the last available floating rate.

The implications of any continuation of LIBOR also need to be understood. If LIBOR continues to be published post-2021 it could be that fallback provisions may not be triggered.

In relation to the loan market, whilst provisions may be included to allow for a lower threshold of consent for changes to a benchmark rate (majority lender vs all lender consent), these provisions are not always commercially acceptable. This is even more complex in the bond market where liability management exercises (such as bondholder meetings or consent

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1 The US loan market does not have a standard set of industry template documentation for loan originations. The template and legacy documentation discussion contained herein does not cover the US loan market.
solicitations) are required to make amendments to existing securities. Amendments to interest rate provisions tend to require a higher threshold for consent by bondholders (often unanimous consent).

- In any case, there may be practical difficulties with obtaining the necessary consent to amendments. Neither the syndicated loan market nor the bond market have a protocol system for amendments (such as that operated by ISDA); therefore each individual loan agreement and outstanding bond referencing LIBOR would need to be amended and renegotiated to refer to an alternative benchmark rate. This will have significant time and cost implications and if there is any value transfer in moving over to an alternative benchmark rate there can be no guarantee of a favourable outcome.

- Parties may also use this as an opportunity to renegotiate terms unrelated to LIBOR (this was seen when certain tenors and currencies for LIBOR were discontinued), which would add further time and complication to any amendment process.

- Economic discrepancy between LIBOR and any alternative benchmark will require discussion on alternative pricing to reflect the change in economics, resulting in significant uncertainty.

- If existing documentation has to be renegotiated, any redocumentation may trigger the falling away of hedging relationships resulting in additional volatility to the financial statements. It may also result in the loss of any regulatory grandfathering arrangements (for example, in respect of EMIR reporting and margining requirements).

5. Current transactions

- As outlined at paragraph 3 above, template documentation cannot be amended until an alternative rate has been developed. Many transactions being documented now are likely to have a maturity extending beyond 2021 and market participants may have no choice but to document these based on LIBOR in the absence of an appropriate alternative rate. This will increase the number of legacy deals impacted by any transition away from LIBOR (and the points raised above in relation to legacy deals will apply equally here).

- For the bond market, a large volume of legacy floating rate products reverting to fixed rate would have unintended consequences for issuers and investors. If this results in bond issuers being required to undertake liability management exercises, a huge volume of such activity in a short period could result in market disruption.

- Alternatively, bond market participants may take the view that, given the lack of alternative rates, issuing a long-term floating rate now will result in too much uncertainty post-2021; so a more prudent approach may be to refrain from issuing floating rate notes (in particular given the upcoming increase in obligations for manufacturers and distributors of products post-January 2018 in light of MiFID II). Any reduction in the issuance of floating rate products will impact on the diversity of the investment options for the investor community. A lack of suitable investment products for investors such as pension funds, investment funds and insurance companies that need to invest in assets that provide matches for their liabilities could result in market disruption.

- Equally for issuers, refraining from issuing floating rate products will not be sustainable for anything other than a very short period. In an attempt to avoid the need for a future liability management exercise, an issuer may endeavour to predict the methodology for determining a new rate. This option could create market risk (with possible systemic consequences).
Appendix 2

Examples of Uses of LIBOR by Corporates

This appendix sets out some examples of the use cases of LIBOR from a corporate end-user perspective. It is based on material produced for the FCA by the ACT. We have reproduced below, for completeness, the table of uses of IBOR by corporates from the FSB “Market Participants Group on Reforming Interest Rate Benchmarks Final Report”, dated March 2014. In addition to this, we have outlined below some observations from the ACT on some use cases of LIBOR for corporate end-users.

<table>
<thead>
<tr>
<th>Uses of IBOR</th>
<th>Cross Currency Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of Benchmark Reform on Corporates</td>
<td></td>
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</tbody>
</table>

**Table 11: Uses of IBOR by Corporate Survey Respondents (non-comprehensive)**

<table>
<thead>
<tr>
<th>Uses of IBOR</th>
<th>Loans/Credit Facilities</th>
<th>Accounting Purposes</th>
<th>Regulatory Cost of Capital</th>
<th>Commercial Contract Clauses</th>
<th>Pricing/Valuation of Financial Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pricing of inter-affiliate/intra-group loans</td>
<td>Asset securitization pricing</td>
<td>Accounting- IBOR may be used in fair value calculations for discounting provisions, impairments and financial leases. It may also affect [indirectly] capitalization of interest for project accounting</td>
<td>As part of the discount rate for property valuation calculations - used in bank lenders’ loan security covenant testing and valuation</td>
<td>Asset transaction Sale &amp; Purchase agreements will occasionally make use of LIBOR benchmarks in the definition of price adjustment mechanisms where the settlement date differs from the effective date of the deal. The buyer would typically agree to pay LIBOR plus a spread during this period.</td>
<td>Used in pricing some trade products, such as contracts for difference (CFDs)</td>
</tr>
<tr>
<td>Hedging of discount rates and/or inflation in respect of defined benefit pension liabilities or other post-employment liabilities.</td>
<td>Pricing on secured and unsecured debt issuance which may be directly linked to IBOR</td>
<td>Indirectly used in setting regulatory cost of capital using a CAPM model with cost of debt components</td>
<td>Price escalation clauses in long-term supply/purchase contracts.</td>
<td></td>
<td>Rate is used in some types of option pricing</td>
</tr>
<tr>
<td>Swapping a debt obligation in one currency to another currency using a cross-currency swap that involves an IBOR</td>
<td>Primary syndicated loan agreement that is IBOR based</td>
<td></td>
<td></td>
<td></td>
<td>Pricing of floaters</td>
</tr>
<tr>
<td>Discount rates for valuation purposes</td>
<td>Pricing of corporate borrowing drawdown and credit lines/facilities</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Performance benchmarks for money market funds and/or other asset managers</td>
<td>Revolving Credit Facility pricing that is based on IBOR</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Standard interest rates for pricing long-term commercial contracts</td>
<td>Interest apportionment between members of a cross-border, cross-currency cash pool</td>
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<td></td>
<td></td>
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<tr>
<td>Late payment clauses in commercial contracts</td>
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<tr>
<td>Long-term project finance contracts / joint ventures</td>
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<tr>
<td>Trade Financing Solutions (e.g. factoring or supply chain financing by highly-rated corporates that provide financing for their suppliers with less direct access to credit)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedging the variable interest rate on a floating rate debt obligation by “swapping” to a fixed rate using an interest rate derivative (could also be “swapping” a fixed-rate to a floating rate using an interest rate derivative)</td>
<td></td>
<td></td>
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</tbody>
</table>
ACT observations

1. Debt finance and derivatives

LIBOR is used to price:

- inter-affiliate/intra-group loans
- bilateral and syndicated loans
- letters of credit
- private placements (US and EU)
- securitisations
- floating rate notes

LIBOR is used in many interest rate derivatives (forwards, swaps, options) and cross currency swaps:

- to determine payment obligations
- for pricing purposes (including for the purposes of providing a quote)

LIBOR is also used in other types of corporate-facing derivatives transactions:

- hedging against risks in the business or against risks in a particular transaction (e.g. securitisation or a structured finance transaction)
- in the context of a corporate’s portfolio management (e.g. managing rates of return on investment / assets against an entity’s liabilities).

2. Commercial contracts

LIBOR may be used as a reference rate applicable to payment obligations in some commercial contracts, for example:

- Late payment clauses in commercial contracts
- Gross up provisions / price adjustment mechanisms in share / business purchase agreements (where payment is made after the completion date)
- It might also be used e.g. to define an investment return hurdle in some contexts

3. Accounting and reporting disclosures in financial statements

LIBOR is used to account for many interest rate derivatives (forwards, swaps, options) and cross currency swaps:

- to calculate the fair value for accounting for the derivative
- to determine hedge effectiveness if hedge accounting
- to calculate and report financial disclosures required by GAAP in the financial statements e.g. IFRS 9
4. **Industry specific uses**

LIBOR may be specified in some industry guidelines, for example:

- for insurers, the EOIPA risk free rates used to calculate pension liabilities currently rely on the LIBOR swap curve and any change will impact on insurers’ capital positions.