INTRODUCTION:
The Alternative Reference Rates Committee (ARRC) is a diverse group of private-market participants and a wide array of official-sector entities, including banking and financial sector regulators, as ex-officio members, that was convened by the Federal Reserve Board and Federal Reserve Bank of New York in cooperation with other U.S. agencies to promote successful transition from U.S. Dollar (USD) LIBOR. Time is of the essence for market participants to prepare given the likelihood that LIBOR will become unusable after 2021.¹

The Secured Overnight Financing Rate (SOFR) is the ARRC’s recommended alternative to USD LIBOR, and the ARRC has published a Paced Transition Plan² with specific steps and timelines to encourage adoption of the rate. The ARRC serves as a forum for cash and derivatives market participants to address the risks of severe market disruption that could result from the cessation of LIBOR and develop and support liquidity in SOFR-based products across cash and derivatives markets.

The ARRC recognizes the importance of providing market participants further clarity on the practical considerations for the transition from LIBOR, and that additional information may be useful to certain firms that have not yet fully commenced taking steps to transition. The ARRC’s “Practical Implementation Checklist for SOFR Adoption” or “Checklist” was developed as an informational document for market participants. It contains a series of considerations across certain work categories. There is a one-page summary followed by details for 10 categories. Statements made by regulators have clearly expressed that (i) the discontinuation of LIBOR is a certainty³ and (ii) market participants should take appropriate action to transition from LIBOR to an alternative risk free rate.⁴

Important disclosures about the checklist:
• It is provided for informational purposes only.
• It does not constitute legal, accounting, tax or financial advice and is not exhaustive.
• It does not define regulatory or supervisory expectations, and whether and to what extent any market participant makes use of it is voluntary.
• It identifies risks and mitigations for asset managers and asset owners. Specific suggestions may not be applicable to all firms. Each market participant should decide for itself whether and to what extent to use the checklist in preparing for the transition from USD LIBOR.
• It focuses on the issues facing firms that manage USD LIBOR assets or exposures but does not address non-USD exposures. All mentions of LIBOR in this checklist, should be considered as referring to USD LIBOR.
• While it might be helpful for other types of users, this checklist is focused on asset managers and asset owners. A prior checklist focused on banks.

¹ Source: The FCA Statement on LIBOR Panels, November 2017, the Future of LIBOR July 2017
² Source: The ARRC’s Paced Transition Plan, adopted in October 2017
³ Source: Opening Statement of Chairman J. Christopher Giancarlo before the Market Risk Advisory Committee Meeting, July 2018
⁴ Source: LIBOR: Preparing for the End, July 2019
Practical implementation checklist summary

The LIBOR transition is a significant event impacting a broad set of financial products and market segments. Given how deeply embedded LIBOR is in the financial ecosystem, it is important to plan, mobilize, and execute a program that encompasses all of a firm’s potential exposures. This checklist was developed to provide considerations for potentially impacted firms.

**Summary - Simplified practical implementation checklist for SOFR adoption**

1. **Establish Program Governance:** Implement a robust governance framework with accountable senior executives to oversee the delivery and coordination of the firm’s enterprise-wide LIBOR transition program.

2. **Develop Transition Management Program:** Establish an enterprise-wide program across functions and businesses to evaluate and mitigate the risks associated with transition with specific considerations for unique product and client exposures.

3. **Implement Communication Strategy:** Develop and implement an enterprise-wide strategy with clear objectives to proactively engage, communicate, and increase levels of education with impacted internal and external stakeholders.

4. **Identify and Validate Exposure:** Quantify and develop a flexible approach to monitor LIBOR-linked assets and exposures through the transition period. Obtain or develop capabilities to value SOFR-based products where transitioning to using those products.

5. **Assess Contractual Remediation Impact and Design Plan:** Understand the financial, customer, and legal impacts resulting from transitioning from LIBOR via fallbacks, and plan mechanisms for implementing those fallback provisions.

6. **Develop Product and Portfolio Strategy:** Develop strategy for redesigning or transitioning the existing portfolio of LIBOR products, where needed, including consideration of using new products based on SOFR. For portfolios tied to LIBOR as a benchmark or investment guideline, understand implications for the forward portfolio and transition where appropriate.

7. **Risk Management:** Identify, measure, monitor and control financial and non-financial risks of transition, establishing processes and oversight routines for ongoing management.

8. **Develop Operational and Technology Readiness Plan:** Develop a plan to address the operating model, data and technology implications required as a result of LIBOR transition, including with respect to vendors.

9. **Accounting and Reporting:** Determine accounting, reporting, and NAV considerations.

10. **Taxation and Regulation:** Determine tax and regulatory considerations.
Practical implementation checklist

Detailed practical implementation checklist for SOFR adoption

1. **Program Governance**
   **Goals:** Implement a robust governance framework with accountable senior executives to oversee the delivery and coordination of the firm’s enterprise-wide LIBOR transition program.
   1.1. Appoint Executive Sponsor(s) and accountable Senior Executive(s) to coordinate and oversee multi-year LIBOR transition program activities across potentially impacted business lines and functions.
   1.2. Identify accountable business sponsors, project/workstream leads, and supporting project management staff to execute transition program activities.
   1.3. Determine approach for rollout of program governance and management framework to all impacted business lines and enterprise functions.
   1.4. Mobilize a Steering Committee chaired by the Executive Sponsor(s), with appropriate senior leadership representation across all business lines and enterprise functions. Mobilize workstream leaders accountable to the Steering Committee.
   1.5. Define periodic communications and reporting with senior management, Board of Directors, Executive Management Committee(s) and appropriate sub-committees.
   1.6. Define and prioritize program objectives, success criteria and internal milestones in line with the ARRC’s Paced Transition Plan and other known industry milestones.

2. **Transition program mobilization**
   **Goals:** Establish an enterprise-wide program across functions and businesses to evaluate and mitigate the risks associated with the transition from LIBOR, with specific considerations for unique product and client exposures.
   2.1. Conduct a comprehensive impact assessment across key areas including financial products, contracts, business processes (including systems, models and regulatory reporting), benchmarks, portfolio guidelines, and fee calculations.
   2.2. Develop an implementation roadmap for a prioritized set of projects with specific considerations outlined for impacted businesses, products and enterprise functions. The roadmap should identify inter-dependencies.
   2.3. Request and confirm resource and budget to deliver the activities in the implementation roadmap.
   2.4. Establish a project management framework to monitor the progress of the implementation plan, and to identify and escalate risks.
   2.5. Proactively monitor and adjust the implementation plan based on evolving and/or shifting external industry and/or regulatory developments.

3. **Communication strategy**
   **Goals:** Develop and implement an enterprise-wide strategy with objectives to proactively engage, communicate, and increase levels of education with impacted stakeholders including senior management, the corporate Board, or fund Board(s) as needed.
   3.1. Define the key objectives and priorities of the external communication plan; align with internal communication efforts.
   3.2. Confirm internal and external impacted groups (clients, regulators, employees, trade associations, the ARRC, and other working groups), prioritizing and segmenting as appropriate
3.3. Confirm communication channels/sources to be used. Establish specific communication workstreams as appropriate, such as for regulators or clients.

3.4. Develop materials for internal and external stakeholders (e.g. formal training material and educational videos, newsletters, client disclosures).

3.5. Educate internal stakeholders (including business leadership) on LIBOR transition program objectives, industry developments and relevant business impacts.

3.6. Provide clear and consistent messaging on transition impacts to both internal and external stakeholders identified in 3.2 above, including clients, investors, shareholders and regulators. Collaborate as needed.

3.7. Work to understand key relationships and vendors that may have varying timelines and any potential impact to the implementation roadmap. As needed, work closely with external relationships and vendors to proactively manage legal, financial, operational, conduct, and reputational risks.

4. Exposure management and valuation

Goals: Quantify and develop a flexible approach to monitor LIBOR-linked product exposure through the transition period. Develop capabilities to value SOFR-based products, as well as products using other alternative rates. Develop capabilities to understand the economic impact of falling back to non-LIBOR-linked terms for assets and liabilities.

4.1. Conduct a product and asset and liability inventory exposure analysis to determine and categorize LIBOR-linked exposures (by asset class, tenor and maturity) including off-balance sheet exposures such as lines of credit, derivatives, as well as asset types such as loans, insurance contracts, and cash deposit accounts.

4.2. Prepare for issuing and/or investing in non-LIBOR-linked products.
   a. Quantify exposures for LIBOR products maturing beyond 2021 including best assessment of future exposures.
   b. For all existing products linked to LIBOR, identify alternative products available for ongoing investments in the future where needed.
   c. Evaluate the impact of LIBOR-linked securities on investment performance and on associated investment fees.
   d. For all products identified as alternatives to LIBOR-linked products, establish internal criteria (such as liquidity, outstanding volume and system readiness) for suitable replacement of existing portfolios of LIBOR-linked products.
   e. Establish cut-off dates for avoiding continued issuance or investment in LIBOR, to the extent permitted by clients or within the control of the investment advisor.

4.3. Understand alternative benchmark data needs for valuation, pricing system, and model updates.

4.4. Ensure that valuation models using LIBOR-based curves are able to handle new curves using new indices, including SOFR / alternative rates.

4.5. Develop a repeatable process for evaluating and reporting what will be post-2021 exposures for trend analysis, sizing of effort, and management. Include scenarios for assets or liabilities that fall back to historical terms.

4.6. Construct / obtain access to a SOFR interest rate curve to be used for pricing SOFR-based products, calculating interest on USD collateral, and discounting USD-denominated derivatives. Firms are advised to confirm vendor system readiness for pricing and risk analytics, as appropriate.
4.7. Review sales documents, performance benchmarks and SEC reporting to identify and replace LIBOR references.
4.8. Identify and replace fund valuation processes that rely on LIBOR and LIBOR-dependent curves.

5. **Portfolio and product strategy**
   **Goals:** Develop strategy for redesigning (or transitioning) the existing portfolio of LIBOR products where needed, including creating or using new products based on SOFR.
   5.1. Define business strategy and timeline for reducing the reliance on LIBOR for fund / product usage. Define specific milestone dates.
   5.2. Define timelines for using new SOFR-linked or alternate non-LIBOR products and benchmarks, considering alignment of hedged product liquidity.
   5.3. Define risk and new fund/investment approval requirements for SOFR-linked funds/products/benchmarks.
   5.4. Understand as appropriate what others in the industry are doing for non-LIBOR funds/products/benchmarks.

6. **Risk management**
   **Goals:** Identify, measure, monitor, and control financial and non-financial risks of transition, and establish processes and oversight routines for ongoing management.
   6.1. Define the key transition risks resulting from LIBOR discontinuation (including market readiness, business impact, documentation requirements, financial and legal) and assess across the firm’s risk framework.
   6.2. Establish processes to measure and monitor the identified material risks under baseline and alternative transition scenarios (e.g., market adoption, product and currency liquidity, current and stress market conditions, internal and external system readiness, vendor preparedness, regulatory consequences, performance impacts, hedge mis-match, client concerns).
   6.3. Identify mitigating actions to address identified transition risks with focus on fund, product, hedge effectiveness, operational, client engagement and conduct.
   6.4. Establish processes for updating business risk management routines.
   6.5. Periodically report the identified material risks to management, including project funding, status and the path to a low/no-risk assessment.
   6.6. Assess impact to LIBOR-linked risk models and develop processes for updating including guidelines for validation requirements.
   6.7. Establish role of key control functions such as Internal and External Audit.
   6.8. Solicit assurances from custodians and vendors that their systems are robust to LIBOR cessation.

7. **Contractual remediation**
   **Goals:** Understand the financial, customer, and legal impacts resulting from transitioning from LIBOR to SOFR or other specified rate for contracts that may move to their contractual fallback.
7.1. Review existing LIBOR-related contracts, service level agreements and benchmarks, including but not limited to offering memorandums, fund prospectuses, investment management agreements or similar documents, International Swaps and Derivatives Association (ISDA) agreements, insurance policies, and credit agreements, to determine the presence and financial impact of fallbacks. This should include inventorying the triggers, changes to terms, financial impact, customer impact, and potential legal interpretations. The review should assemble relevant information into a vehicle for capturing contractual data, and may entail the use of imaging or automation, depending on volumes. Please note that this information may come from third parties such as product administrators, trustees or vendors.

7.2. Using this review, project the impact if the fallbacks execute and use this to inform future steps and priorities. This is a combination of expected financial, legal, client/customer, and operational impact.

7.3. Develop tools to track remediation progress.

7.4. For all new contracts that reference LIBOR, incorporate robust fallbacks where possible, such as the recommended fallback language developed by ARRC, ISDA, and other industry working groups.

7.5. For existing contracts and benchmarks that reference LIBOR, define approach and prioritization strategy for renegotiating / repapering where needed so as to include enhanced fallbacks or amendments simplifying transition. The approach should consider the work required to remediate in advance and how to realize economies of scale. Following FASB and tax guidance, begin either (a) amending contracts to incorporate enhanced fallback language, or (b) determining if contracts can be renegotiated or closed out prior to end-2021.

7.6. For securities or contracts with fallback language that is either inadequate or nonexistent, begin efforts to negotiate or otherwise establish a process through which sufficient fallback language can be determined. These efforts may involve bilateral negotiations with counterparties or issuers, or other solutions as they become available.

7.7. Assuming a material number of contracts cannot or need not be remediated, determine size and program needed to understand, value, and implement fallback language, and begin planning. Note this includes customer notification processes as legally required and appropriate to the business.

8. **Operational and technology readiness:**

**Goals:** Develop a plan to address the operating model, pricing models, data, benchmark, and technology implications to enable a successful transition.

8.1. Assess where LIBOR is used front-to-back across all affected business processes and operations. Different business lines will have different types of usage and need different levels of prioritization.

8.2. For each business line, and for core functions (such as Finance, Treasury, Portfolio Management, and Investment Accounting), inventory technology, operational processes, end-user computing and modeling tools to understand specifically where they are using LIBOR.

8.3. Develop a process to incorporate new market data sources and related new calculation methodologies into firm systems, coordinating with vendors as appropriate and needed. As new products using new rates emerge it will be essential to be consistent with industry best practices. Market participants, however, should use readily available alternative rates rather than wait for the development of other markets or benchmarks.

8.4. Define requirements and implement capabilities to invest in SOFR products that will be the replacements for LIBOR-linked products.
8.5. Support the technology needs of fallback processing, both for the transition itself and for ongoing processing (refer to item 7 for contract remediation.)
8.6. Prepare internal systems and validate external system readiness (e.g. custodial and pricing services) for processing corporate actions and other bulk contract amendments across invested assets and hedges.
8.7. Build testing plan(s) for new product capabilities, models / model validation and the operationalization of fallback processing. Ensure the readiness plan will encompass oversight of the readiness state of material operational and technology vendors.
8.8. Begin to plan for internal testing, third party validation and readiness for transition. Prepare for potential industry-wide testing.
8.9. Conduct table-top exercises with internal stakeholders and/or key vendors to cover the transition, ongoing processing, and contingency planning. The exercises should consider factors such as volume and processing capacity for both successfully and unsuccessfully converted LIBOR-products.
8.10. Collaborate where appropriate and as needed with industry associations to test the transition across asset classes validating inter-company inter-operability; for example, work with vendors and counterparties to potentially test transitional corporate actions and ongoing alternate-rate processing via “dummy” securities.
8.11. Ensure that documentation around key controls is contemporaneously updated.
8.12. Firms that have cleared swaps should familiarize themselves with CCP plans to transition the discounting and PAI in USD-discounted products to SOFR.

9. Accounting and Reporting, including Investment and Client Accounting

Goals: Determine the technical accounting considerations along with related reporting considerations, including fund performance and customer statements.

9.1. Identify LIBOR-based benchmarks, develop alternatives, and build those alternatives into performance contracts.
9.2. Identify and understand impacts to hedge accounting standards and processes based on current guidance5 (e.g., hedge de-designation, ineffectiveness).
9.3. Identify and understand impacts to accounting standards and processes for cash products, tracking accounting developments as finalized.
9.4. Identify impact on fair value accounting and impairment to P&L, credit allowances, and changes to the fair value hierarchy.
9.5. Identify impact on current state finance systems, operations, reporting and customer statements, and assess control environment for impacted processes.
9.7. Determine 1940-Act Fund Accounting implications of fall-back conversions on the NAVs of affected share-classes, as well as of an ongoing multi-rate environment.
9.8. Update financial disclosures accordingly including fillings, 10-K and Q if applicable.
9.9. Remediate systems and processes as necessary. Test and implement accounting and reporting changes accordingly.

5 The ARRC is seeking regulatory relief from U.S. prudential and other market regulators as well as the Financial Accounting Standards Board to facilitate the transition from LIBOR to SOFR. For example see the April 2019 Tax Issues Letter from the ARRC.
10. **Taxation and Regulation**

**Goals:** Determine the applicable tax and regulatory considerations along with related reporting considerations.

10.1. Identify and understand tax impact of hedge accounting based on current guidance. Tax documentation may need to be updated to ensure hedging continues to be effective.

10.2. Determine tax accounting and compliance implications including, but not limited to, (a) whether or not the fall back transition is a taxable event, and (b) implications of taxable gain / loss to debt holders, swap counterparties, general account assets, and investment clients.

10.3. Determine impact of tax on regulatory capital. Forecast potential impact of deferred tax assets on Common Equity Tier 1 and Risk Weighted Assets.

10.4. Determine tax reporting requirements.

10.5. Identify if regulations such as those covering public companies or other types or regulated entities would require disclosure of the impact of the issue in public filings or in other disclosures—and if so, begin process of making such disclosures.

10.6. For 1940 Act Funds, determine impact on operation and effectiveness of liquidity risk management programs.
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