

LIBOR TO SOFR TRANSITION JOURNEY

Awareness, Assessment, Strategy, Implementation, Transformation, Support

2020 - 2021

INTRODUCTION

LIBOR is likely the most important reference index in the history of financial markets and it's going to sunset at the end of 2021. It is integrally embedded, both visibly and obscurely, in a vast variety of financial instruments such as floating rate bonds, business loans, adjustable rate mortgages, student loans, municipal bonds, interest rate swaps, and many varieties of insurance products, and derivatives. Per SIFMA, an estimated \$200 trillion of financial contracts and securities are linked to USD LIBOR, and that matters to everyone. LIBOR based agreements affect banks, brokers, insurers, asset managers, REITs, and financial market participants including small businesses, corporations, consumers and investors. Only about 60% of these contracts and agreements will mature before 2021 and the remainder millions of agreements for \$80 trillion will need remediation through fallbacks, negotiations, or litigation. Despite the mountain of inventory, new LIBOR activity continues unabated today.

In the U.S. in 2014, the Federal Reserve & New York Fed established the Alternative Reference Rates Committee (ARRC) to lead the transition away from LIBOR. The ARRC continues to lead the transition towards Secured Overnight Funds Rate (SOFR). The regulatory pressures for the industry transition from LIBOR to SOFR creates three fundamental challenges. *First*, SOFR is not conceptually, economically, transactionally, and legally equivalent to LIBOR. The change is much more than applying a simple conversion rate to the values in products to arrive at an economically equivalent contract. The transition will encounter significant challenges not only in financial adaptations but also in legal and counterparty engagements to modify contracts that reference LIBOR within the allowed timeline! *Second*, SOFR does not have a term structure yet; this will bring considerable costs and risks for financial firms with long-term implications since LIBOR is integral to all manner of financial activity and valuation frameworks. The transition will transform firms' market risk profiles, requiring changes to risk models, valuation tools, hedging strategies, payment systems, product design etc. *Third*, only the large and informed market players are moving fast and gathering necessary resources in advance; it is highly likely that late adapters will face higher costs to mitigate their internal risks before the sunset of LIBOR at the end of 2021. Given the volume of products and processes that will have to change, the transition away from LIBOR entails considerable work and risk. Preparations should start immediately.

WHERE WILL INSTITUTIONS SEE A MAJOR IMPACT

1. Legal agreements may be affected by regulatory and legislative actions beyond their inherent terms and conditions of:
 - Fallback terms and triggers
 - Enforceability of fallback language
 - Amendment timing
2. Valuations will be affected at a systemic level:
 - All financial instruments based on LIBOR as a rate or OAS valuation will need remarking using SOFR curve and volatility
 - All P&L impacts to portfolios and contracts will need to be ascertained and validated
 - Scenario Analysis, Stress testing, SOX Controls will need to be conducted and revalidated using SOFR models.

KEY CHALLENGES

1. Assessment of Impacts, Gaps, Resources, Readiness
2. Strategy Development, Transition Roadmap, Action Planning
3. Implementing Durable Solutions within the Timeline
4. Business Intelligence Infrastructure
5. Support, Training, and Enhancements

OUR EXPERTISE

We can help your business, finance, operations, and systems adapt to challenges, that will be encountered at a scale exceeding those before Y2K. We have a specialized team of subject-matter-experts to help clients meet challenges, that will be encountered in the sunset of LIBOR and transition to SOFR. Our practitioner SMEs are the forefront of the industry and intimately aware of the issues impacting a wide array of players. We weave our Mortgage and Capital Markets expertise and Project Management experience to assess impacts on your functions across the business value chain, develop the roadmap and workplans to deliver the transition, and successfully implement integrated solutions that will be durable.

ENGAGEMENT SERVICES - HOW WE CAN HELP

1. Impact Assessment of Challenges across the Business Value Chain & Strategic Direction:

- Front-Office Sales & Trading
- Treasury & ALM
- Finance & Operations
- Valuation & Market-Risk
- Legal & Disclosures
- Compliance & Controls
- Accounting, Tax, Internal Audit

2. Transition Roadmap and Actions to meet challenges for:

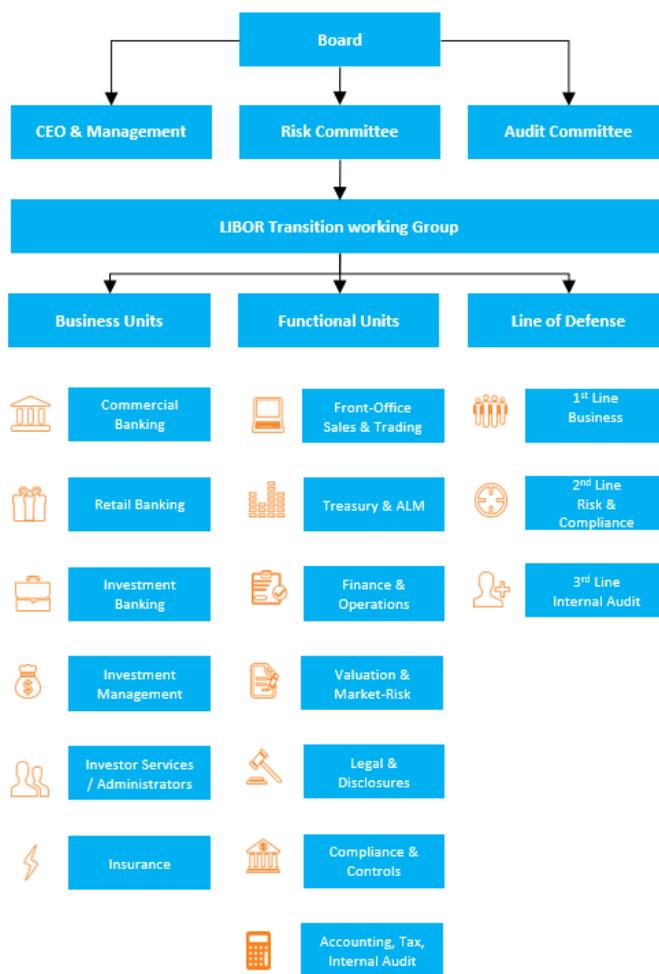
- Products
- Data & Analytics
- Quantitative and Management Models
- Workflows including internal and external linkages, calculations, settlement, payments, collateral
- Technology & Infrastructure

3. Implementing Cost-Effective and Durable Solutions:

- Governance structure for the 3 lines of defense
- PMO
- Change management
- Risk Management
- External communications

4. Business Intelligence, Management Information, Risk-management Infrastructure

- Scenario Planning
- Documentation
- Training to bridge knowledge gaps
- Post transition support



LIBOR to SOFR Transition Governance structure and the 3 lines of Defense

Transition roadmap and suggested timelines for program implementation

Key -->	Advised Timeline for Each Phase	Expected Time to Execute the	2020				2021			
Phases	Expected Activities		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1	Assessment: Financial and Other Exposures, Risks, Impacts & Roadmap Identify impacts and gaps for all business lines and across the enterprise Create remediation roadmap and identify initiatives for resolution									
Phase 2	Strategy: Business, Operations, Financial, Systems, Legal+Ancillary (5 dimensions) Interview client officials to evaluate business, operational, systems impact Evaluate the scope & scale of transformation and prioritize initiatives									
Phase 3	Implementation: Integrated Action Plans across all 5 dimensions Conversion of legacy documents, agreements, contracts, instruments Communication with customers, counterparties, and vendors Development of Products, Models, Valuation, Policies, Controls									
Phase 4	Transformation: Cohesive and Coordinated Transition of all 5 dimensions Testing all aspects of implementation and Operating in Parallel Full Transformation with ability to shut-off Legacy									
Phase 5	Support: On-going Support and Training Complete LIBOR to SOFR Transition Journey; Shut off Legacy Post-Transformation Enhancements									

CONCLUSION

LIBOR transition will be bigger than any other transformation that we have seen in recent decades. There are significant risks and managements/ boards should start on planning for the transition journey now. While 2021 may seem far away, the tasks involved in mitigating risks and to be fully compliant on day one, will be daunting and one has to start planning now. Many firms have already instituted a "Transition Program" and are well on their way with conducting the gap analysis. Firms should also expect regulatory scrutiny on the preparedness of their operations to meet this challenge. Boards should identify the risks emanating from non-compliance and non-preparedness, when the transition happens. Firms that are not ready to meet this challenge will have to pay a heavy price as the transition deadline approaches and highly qualified subject matter experts are fully engaged.

ABOUT FIRM ADVISORS

FIRM Advisors is strategy and transformation consulting firm focused on improving the efficiency, profitability, and risk-management of clients in Mortgage and Capital Markets, Banking, and Insurance.

Our experts have extensive hands-on experience in trading, modeling, valuing, processing, and managing billions of dollars of mortgages, debt, derivatives, loans, liquidity and capital products.

We view our Clients as strategic partners and take great pride in working with them. We identify performance gaps, improve operations, conduct complex data analysis, validate models, advise on product pricing and valuation, devise hedging scenarios, and help resolve governance issues.

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