LIBOR Transition for Non-Financial Institutions

March 2021

Private and Confidential

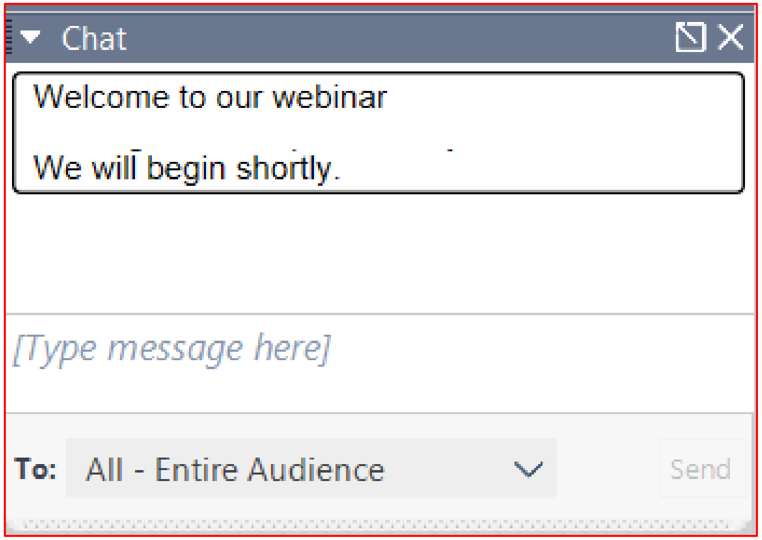
DUFF & PHELPS

A KROLL BUSINESS

Agenda

Notes:

- Ask questions via chat >
- We'll try to answer as many questions as possible
- Handouts included within client



Notes:

- Session is being recorded. You’ll receive access to the recording in a couple of days
- CPE Credit: must complete all 4 poll questions. Please message organizers and we will follow up with a certificate after the session
- Please note that this presentation was carefully researched but does not represent legal or financial advice

Introduction

OUR EVOLUTION

In operation for nearly 100 years

1932

Duff & Phelps founded and evolves into diversified financial services firm

1994

Credit ratings business spun-off

2005

Acquired **Corporate Value Consulting** (CVC) from Standard & Poor's

2007

Listed on the **NYSE**

From 2007 to 2012, **acquired 14 businesses** to expand service offerings

2013

Taken private by a private equity consortium led by **The Carlyle Group** and the **Duff & Phelps management team**

2015

Acquired **American Appraisal** to expand global Valuation Advisory Services practice

Acquired **Kinetic Partners** and launched Compliance and Regulatory Consulting practice

2016

Acquired **CounselWorks** to expand Compliance and Regulatory Consulting practice

Acquired **Tregin Solutions** to expand technology solutions capability of Legal Management Consulting

2017

Acquired **Quantera Global Asia,** the leading Asia Pacific transfer pricing firm, to enhance our presence in the region

2018

Duff & Phelps is acquired by **Permira Funds**, the global private equity firm

Acquired **Kroll** and launched Governance, Risk, Investigations and Disputes practice

2019

Acquired **Prime Clerk**, **Forest Partners**, **Heffler Claims** and **Zolfo Cooper Asia**

2020

Duff & Phelps acquired by investor consortium led by **Stone Point Capital** and **Further Global**

Acquired **Blackrock Expert Services Group, Borrelli Walsh, Verus Analytics, Lucid Companies** and **RP Digital Security**

2021

Duff & Phelps rebranded to **Kroll**

Panel

Jennifer Press

Managing Director, Alternative Asset Advisory

New York

+1 212 450 2883

Jennifer.Press@duffandphelps.com

Marcus Morton

Managing Director, Valuation Services

London

+44 0207 089 4946

Marcus.Morton@duffandphelps.com

Rich Vestuto

Managing Director – Information Governance, Records and CLM

New York

+1 212 277 0130

Rich.Vestuto@duffandphelps.com

Mark Turner

Managing Director, Regulatory Consulting

London

+44 207 089 0834

Mark.Turner@duffandphelps.com

Polling Question 1

Please choose the category that best represents you?

A. Multi-National Corporate Entity

B. US Corporate Entity

C. EMEA Corporate Entity

D. Pan-asian Corporate Entity

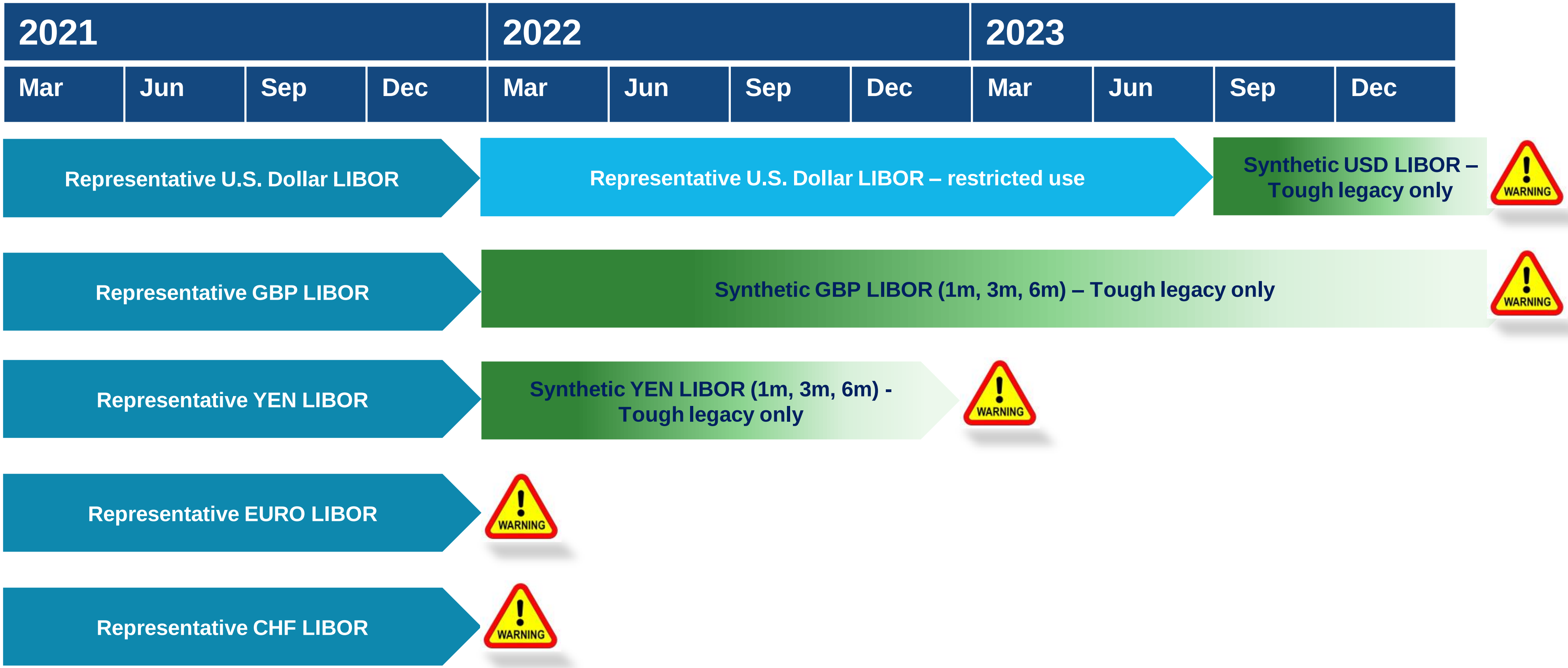
E. Other

LIBOR Transition – Recent Updates

LIBOR Transition Key Updates

- On March 5, 2021, the FCA announced that **all Sterling, Euro, Swiss Franc, Japanese Yen LIBOR settings, and the 1-week and 2-month US dollar LIBOR setting** to cease publication after December 31, 2021
  - The FCA will likely **force the continued publication of 1m, 3m and 6m for GBP and Yen LIBOR as synthetic rates**, meaning they will be based on overnight rates plus a spread adjustment rather than panel bank submissions.
- On November 30, 2020, ICE announced the extension of the publication of **overnight** and **one-, three-, six- and 12-month USD LIBOR** interest periods, to **June 30, 2023**, subject to market consultation
- ISDA confirmed that the FCA's statement constitutes a cessation event under its protocol governing much of the global OTC derivatives referencing LIBOR. As a consequence, the **fallback spread adjustment published by Bloomberg was fixed as of March 5, 2021**.
- Forward Term SONIA rates have begun publication and term SOFR rates are still developing
- The Federal Reserve is **intensifying its scrutiny** of banks' efforts to shed their reliance on USD LIBOR, and has begun compiling more detailed evidence on their progress

LIBOR Transition Timelines

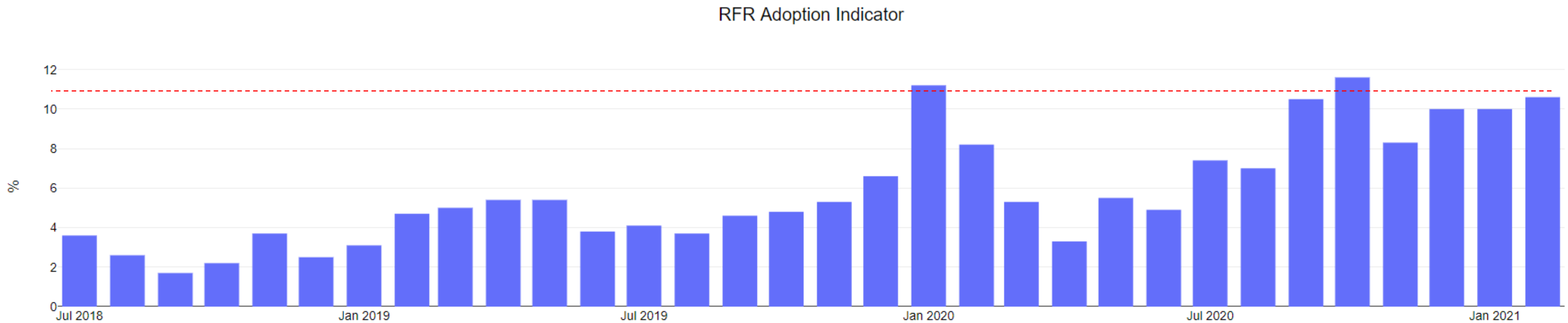


Key Takeaways

- Market participants must **understand their exposures**, in particular the contractual provisions regarding alternative reference rates, fallbacks, governing jurisdiction, and amendments
- Existing credit agreements with an expiry date after December 31, 2021 or June 30, 2023 depending on the LIBOR setting **should be amended as soon as practicable** to include the appropriate LIBOR fallback language
- **All new issuance of LIBOR products to cease** before December 31, 2021

Where Are We With Risk Free Rate (RFR) Adoption Rate?

ISDA-Clarus RFR Adoption Indicator



Source: ISDA-Clarus

In February 2021, the indicator stood at 11% of risk-weighted DV01 activity across all interest rate derivatives and LIBOR currencies plus AUD.

97%

OF GBP INTEREST RATE DERIVATIVES COVERED BY FALLBACKS*

98%

OF FRNS REFERENCING USD LIBOR HAD MATURITIES BEFORE JUNE 30 2023^

*Source: FCA estimate

^Source: ICMA

LIBOR Transition – Practical Implementation Checklist

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, consistently 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 exposures through the transition period. Obtain or develop capabilities to value alternative reference rate (ARR) based products as part of transition to using those products.
5. **Develop Product Strategy:** Develop strategy for redesigning or transitioning the existing portfolio of LIBOR products, including creating or using new products based on ARR.
6. **Risk Management:** Identify, measure, monitor and control financial and non-financial risks of transition, establishing processes and oversight routines for ongoing management.
7. **Assess Contractual Remediation Impact and Design Plan:** Understand the financial, customer, and legal impacts resulting from transitioning from LIBOR to ARR via fallbacks, and plan mechanisms for implementing.
8. **Develop Operational and Technology Readiness Plan:** Develop a plan to address the largescale operating model, data and technology implications required for LIBOR transition.
9. **Accounting and Reporting:** Determine accounting considerations along with related reporting considerations.
10. **Taxation and Regulation:** Determine the tax and regulatory reporting considerations.

Are you Ready for the Transition?

Polling Question 2

Where are you in your LIBOR transition process?

A. We haven’t started yet

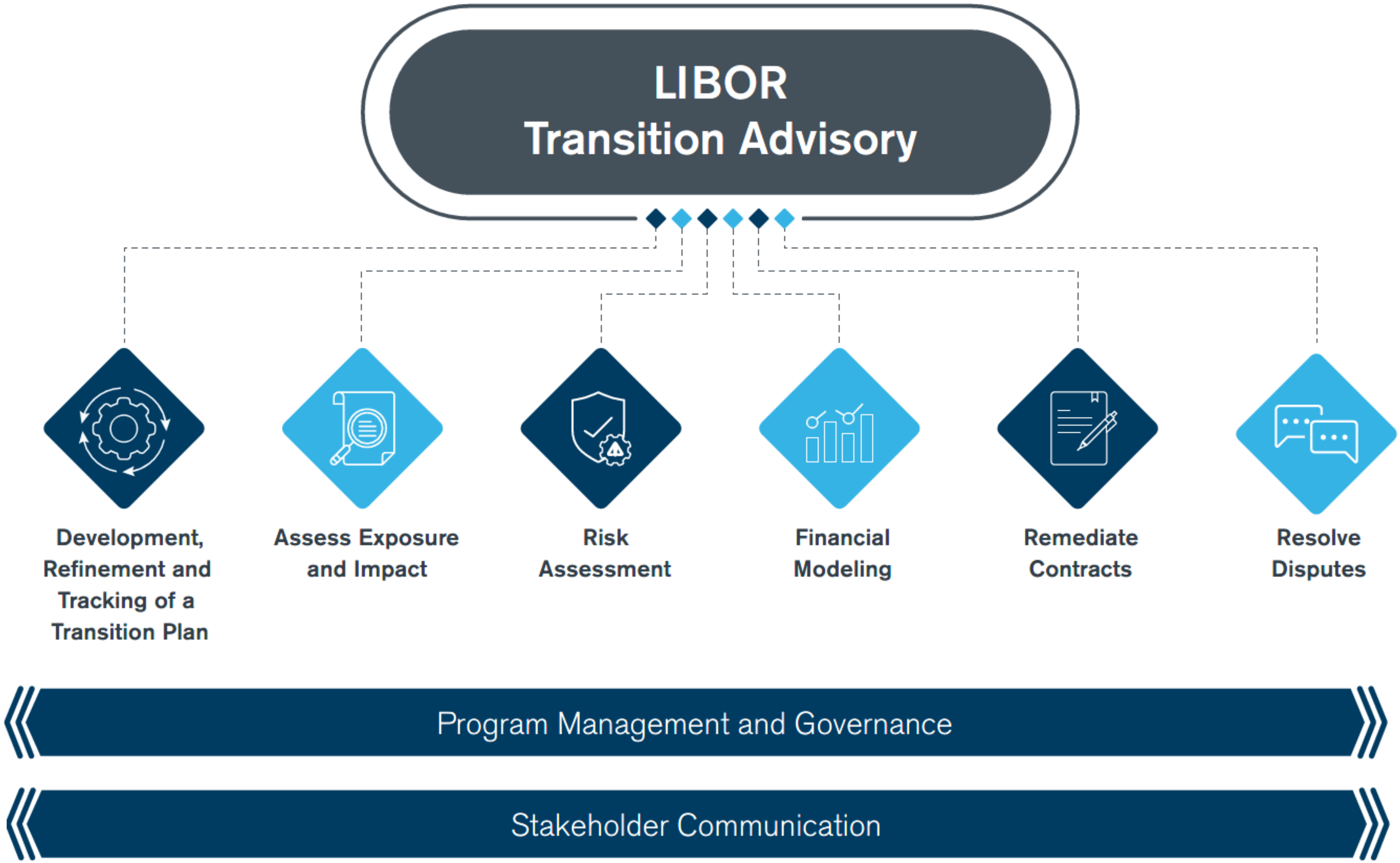
B. Just started thinking about it

C. On track to be ready by mid 2021

D. On track to be ready by December 2021

E. Not on track to be ready before at least Q1 2022

Various Phases of LIBOR Decommissioning



Development, Refinement and Tracking of your LIBOR Transition Plan

Program Governance

- **Implement** a **robust governance framework** with accountable senior executives to oversee the delivery and coordination of your LIBOR transition plan
- **Determine approach for rollout of program governance and management framework** to all impacted business lines and enterprise functions
- Define and prioritize program objectives, success criteria and internal milestones in line with the **ARRC's Checklist**

Transition Management

- Conduct a **comprehensive impact assessment** across key focus areas including, but not limited to, financial products, contracts, business process (including systems and models)
- Confirm **resource and budget needs** to deliver the activities in the implementation roadmap
- **Proactively monitor and adjust the implementation** plan based on evolving and/or shifting external industry and/or regulatory developments

Contract Discovery

Approach

Find and Organize

- Define Recovery Opportunity and Risk Mitigation
- Interview Stakeholders
- Identify Relevant Contract Types
- Map Locations

Test

- Ingest Contracts and Agreements
- Process Using Machine Learning
- Assess and Test Validity of Discovery Opportunities

Review

- Search
- Terms and Provisions Extraction for Relevant Policies and Provisions that Represent Potential Opportunities for Revenue Recovery and/or Risk Mitigation

Execute

- Develop Revenue Recovery and Risk Mitigation Strategy and Plan
- Execute

- Identify Opportunities and Risks
- Ongoing Management of Opportunities and Risks in Contracts
- Greater Efficiency in Identifying Opportunities and Risks
- Better Understanding of Contract Value

Do You Know What is in Your Contracts?

LIBOR Language?

PROBLEM: Review of current rights and restrictions within specific contracts affected by the regulation to identify key attributes and biased terms

Key discovery fields for your LIBOR exposure "Catalogue"

Deal Overview

- Agent(s) / Trustee(s)
- Issuer / Co-Issuer
- Borrowers
- Collateral Manager
- Currency
- Governing Law
- Term
- Maturity Date
- Renewal Period

Collateral

- Collateral Asset Type
- Collateral Rate Type
- LIBOR Relevant (Collateral)

LIBOR

- LIBOR Relevant (Security/Loan)
- Determining Party
- Fallback (LIBOR)
- Fallback Details
- Alternative Reference Rate(s)
- Amending Agreement
- Amendment Jurisdiction

Polling Question 3

How much effort do you consider will be required to transition your organisation from LIBOR?

A. Very little/no effort

B. Some effort - small project team within our organisation

C. Medium effort – project team using existing resources

D. Significant effort – major project which cannot be fully resourced internally

E. Not sure/haven’t thought about it

Stakeholder Communication

- Important to continue to develop and implement your communication strategies, in consideration of regulatory requirements. Depending on jurisdiction:
  - This may include highlighting both benefits and risks for borrowers/clients
  - Contractual negotiations may need to consider the knowledge and sophistication of the counterparty to ensure their fair treatment (retail, professional, market counterparty)
- Provide the necessary documentation and support to satisfy the needs of both internal and external stakeholders
- Technology avaliable to assist in the delivery of communications across varying audiences as needed

Importance of Documentation

A clear client communication strategy, underpinned by **detailed program controls and documentation** is vital

- Key Considerations:
  - Documentation or descriptions of any analysis performed to **identify contracts or obligations held and/or issued** by your firm that may be affected by the LIBOR Transition and any remediation plans thereof
  - Documentation or descriptions of any analysis performed to identify **LIBOR-based risk or valuation models** used by your firm, including information regarding changes that may be needed to account for a new reference rate, if any
  - Information regarding any changes made or planned to be made to your **information technology systems** (e.g., accounting, investor reporting, risk, valuation or trading) to accommodate the LIBOR Transition
  - Information regarding any **third-party vendors** that may be impacted by the LIBOR Transition, including the services provided (e.g., back office) and how the vendor may be impacted
  - Determine accounting and reporting considerations
    - Discuss with **legal and accounting** firm as appropriate
    - Update **financial disclosures** as needed

Valuation Challenges / Considerations

Term Structure

- **Market Observation**
  - The alternative reference rates (ARR) developed to-date are **overnight rates**. There are ongoing efforts to develop forward looking term structures for the ARRs, the most advanced of these is in SONIA where there is sufficient depth in the ARR derivatives market. It is also expected that a SOFR term rate will develop

- **Valuation Challenge**
  - Without published forward curves, market participants carry out certain **approximation approaches** through the use of indicative forward-looking term rates as published by the Federal Reserve, and a combination of bootstrapping and extrapolation techniques.

Credit Risk

- **Market Observation**
  - Among other factors, such a **spread differential** primarily highlights the difference in market expectations driven by the perceived credit risk associated with each of the underlying ARRs.

- **Valuation Challenge**
  - This challenge will need to be tackled with a **focus on the expected cash flows** associated with the underlying instruments
  - Market participants will need to **re-examine the estimation process of the discount rate** to account for the different risk profile upon transitioning from a legacy LIBOR instrument to a new ARR instrument

Selecting an Alternative Reference Rate

- While SOFR has been identified as the presumptive USD LIBOR alternative reference rate, other indices market participants are choosing to consider in their transition plans include Ameribor and the Prime Rate

Possible Hurdles

- **Structure of the rate themselves**
  - SOFR a daily rate market without an active and observable derivatives market with no objectively observable forward term rates (set to be published June 30, 2020 per ARRC
- **SOFR "in arrears" methodology**
  - Simple calculation methodology (ARRC recommended)
  - Compounded daily methodology (ISDA recommended)
- Challenge for market participants with loan portfolios hedged with interest rate derivatives

Technical Considerations

- **Appropriate spread adjustment**
  - Regulating bodies are currently leaning towards spread adjustments based on historical differences between SOFR and the respective LIBOR indices over a five-year lookback period
  - ARRC set to publish the recommended spread adjustments to the forward SOFR term by June 30, 2021

Contract Remediation

Using Technology to Remediate/Repaper

Interviews

- Enable data analytics and stakeholder surveys to scope out specific affected third parties

Contract Extraction

- Leveraging NLP and text analytics, large numbers of contracts can be searched and key clauses, data points, party names, etc. can be extracted, indexed and reviewed.

Contract Review

- Related to contract extraction is the review of the information gleamed from NLP.
- Was the information extracted properly?
- Are there issues with the clauses?

Negotiate

- Leverage a technology framework to negotiate with pre-approved legal clauses

Key Benefits

Establishing a framework that can govern the entire life cycle of a contract, from identifying insufficient agreements to repapering and signing

Regulatory Considerations

What the Regulators have said….

The agencies encourage banks to cease entering into new contracts that use USD LIBOR as a reference rate as soon as practicable and in any event by December 31, 2021, in order to facilitate an orderly—and safe and sound—LIBOR transition.
Board of Governors of the Fed, FDIC, OCC *– Statement on LIBOR Transition*

"When transitioning their existing contracts, firms receiving LIBOR-linked interest are not expected to give up the difference between LIBOR and SONIA"
FCA, Conduct Risk during LIBOR transition

"Has management identified appropriate replacement rates and adjustment methodologies that do not result in customer harm or expose the bank to unwarranted compliance and reputation risks?"
OCC, LIBOR self-assessment tool

The SEC *"encourages […] entities to analyze how this change [discontinuation of LIBOR] will impact them – their business, systems, models, processes, risk management frameworks, and clients – and to respond accordingly."*
SEC, Staff Statement on LIBOR transition

What corporate customers should expect

Communication

- Firms are expected to communicate to their customers about the changes resulting from the LIBOR transition
- Communications must be clear, consistent and not misleading
- They should set out benefits as well as risks that the chosen transition path brings
- They should also set out steps and decisions customers need to take

Fair treatment

- The transition process itself should be as fair as possible to all customers
- Smaller customers should not be deprioritised
- Where conflicts of interest exist, firms must identify and manage them; where they cannot be managed, firms should prioritise the needs of customers

Fair outcomes

- The LIBOR transition should not result in significantly increased costs to customers
- In the UK, the FCA has made this an explicit expectation
- New products referenced to RFRs or other benchmarks should demonstrably be able to meet the needs of customers – otherwise there is a risk of mis-selling

Polling Question 4

Where are you exactly in your transition plan?

A. Haven't started yet

B. Believe no LIBOR exposure, not conducted formal process

C. Identified LIBOR exposures, not catalogued transition provisions yet

D. Catalogued LIBOR exposures but unsure what to do next

E. Comprehensive LIBOR transition plan in place

Key Takeaways

Key Takeaways

- Now that the cessation announcement has been made any possible extension unlikely and regulators are pushing for new LIBOR issuance to cease
- The best place to start the transition is to understand what and where are LIBOR exposures within each company as soon as possible
- Regulators and other stakeholders are intensifying their scrutiny on the transition so having a clear plan and communication strategy is vital
- There are multiple ways to transition – fallbacks are not the only or the best solution – so careful scenario analysis is needed to identify the best course of action in each case
- A lot of focus is on the transition of the legacy portfolios but equally a firm must be operationally ready to value, risk manage and report in the new rates environment for new business

Q&A

DUFF & PHELPS
A KROLL BUSINESS

Jennifer Press

Rich Vestuto

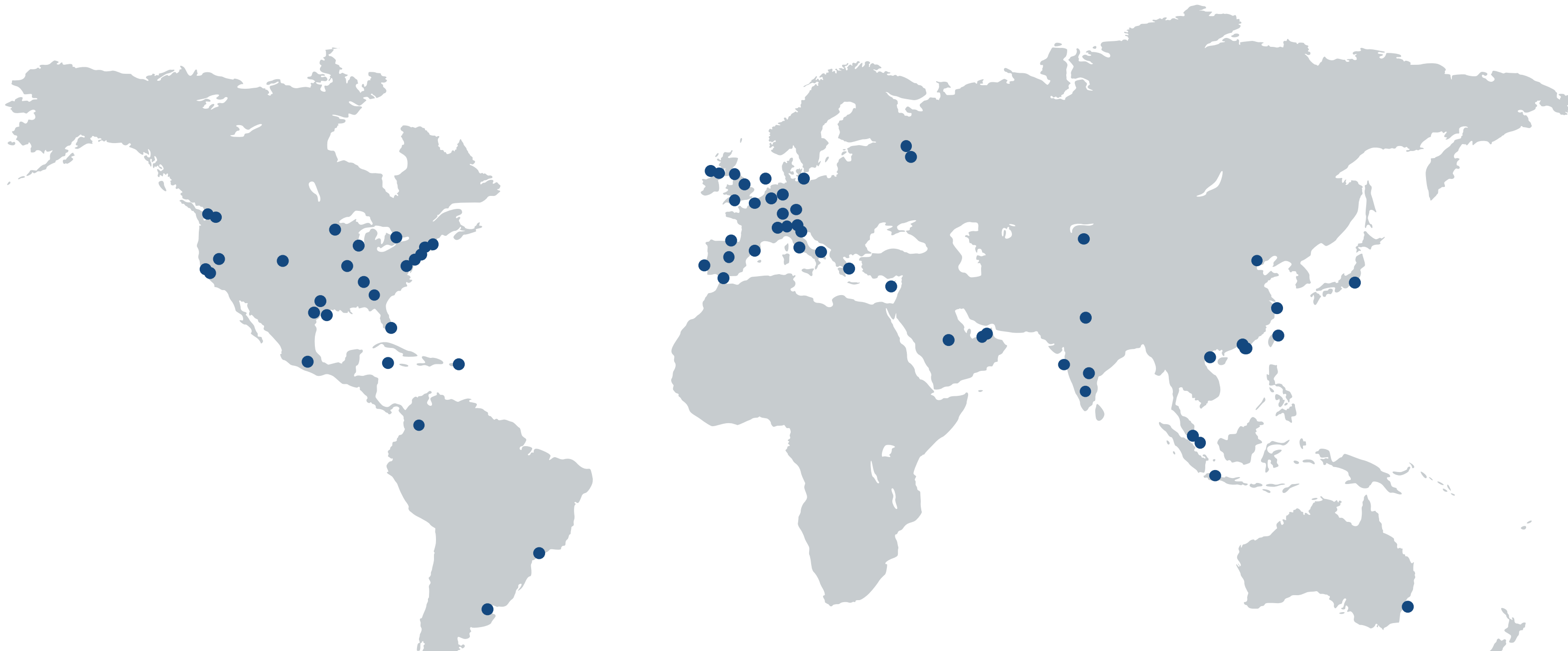
Mark Turner

Marcus Morton

For more, visit duffandphelps.com/libor

OUR LOCATIONS

Across 30 countries and territories worldwide



THE AMERICAS

Addison	Houston	San Francisco
Atlanta	Los Angeles	São Paulo
Austin	Mexico City	Seattle
Bogota	Miami	Secaucus
Boston	Minneapolis	Silicon Valley
Buenos Aires	Morristown	St. Louis
Chicago	Nashville	Toronto
Dallas	New York	Washington, D.C.
Denver	Philadelphia	Waterbury
Ellensburg	Reston	Westchester

EUROPE AND MIDDLE EAST

Abu Dhabi	Dublin	Moscow
Agrate Brianza	Frankfurt	Munich
Amsterdam	Gibraltar	Padua
Barcelona	Lisbon	Paris
Bari	London	Pesaro
Berlin	Longford	Riyadh
Bilbao	Luxembourg	Rome
Birmingham	Madrid	Turin
Channel Islands	Manchester	Zurich
Dubai	Milan	

ASIA PACIFIC

Bangalore	New Delhi
Beijing	Shanghai
Guangzhou	Shenzhen
Hanoi	Singapore
Hong Kong	Sydney
Hyderabad	Taipei
Jakarta	Tokyo
Kuala Lumpur	
Mumbai	

CARIBBEAN

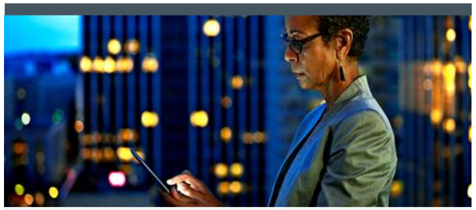
British Virgin Islands
Cayman Islands

STRATEGIC PARTNERS

Almaty
Athens
Limassol
Moscow

ENHANCING VALUE ACROSS A RANGE OF EXPERTISE

Our service areas



VALUATION ADVISORY

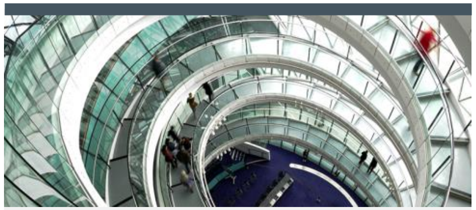
Valuation and consulting for financial reporting, tax, investment and risk management purposes

- Valuation Services
- Alternative Asset Advisory
- Real Estate Advisory
- Tax Services
- Transfer Pricing
- Fixed Asset Management and Insurance Solutions

CORPORATE FINANCE

Objective guidance to management teams and stakeholders throughout restructuring, financing and M&A transactions, including independent fairness and solvency opinions

- M&A Advisory
- Fairness and Solvency Opinions
- Transaction Advisory Services
- ESOP and ERISA Advisory
- Private Equity - Financial Sponsors Group
- Distressed M&A and Special Situations
- Private Capital Markets and Debt Advisory



GOVERNANCE, RISK, INVESTIGATIONS AND DISPUTES

Risk management and mitigation, disputes and other advisory services

- Business Intelligence and Investigations
- Compliance and Regulatory Consulting
- Compliance Risk and Diligence
- Cyber Risk
- Disputes Consulting
- Global Restructuring Advisory
- Legal Management Consulting
- Security Risk Management

BUSINESS SERVICES

Complex legal and business solutions through our proprietary technology and team of experts

- Prime Clerk Restructuring
- Kroll Corporate Actions
- Lucid Issuer Services
- Lucid Agency and Trustee Services
- Kroll Class Action Administration
- Kroll Mass Tort Administration
- Kroll Notice Media Solutions
- Kroll Business Technology
- Kroll Agency Cloud

OUR CREDENTIALS

WE SERVE

61% of Fortune 100 companies

85% of Am Law 100 law firms

72% of the 25 largest Euro STOXX® companies

76% of the 25 largest private equity firms in the PEI 300

52% of the 25 largest hedge funds in the Alpha Hedge Fund 100

1. Source: Thomson Reuters' cumulative data 2011-2020
2. Source: Thomson Financial Securities Data (U.S. deals $10M < $150M, including deals without a disclosed value). Full years 2011 through 2020
3. Who's Who Legal 2018-2020: Forensic and Litigation Consulting.
4. HedgeWeek 2018

WE RANK

One of America's Best Management Consulting Firms 2020[9]

#1 Total Number of U.S. and Global Fairness Opinions Over the Past 10 Years[1]

#5 U.S. Middle-Market Transactions Over The Past 10 Years[2]

Leading patent consulting firm[11]

5. HFM European Quant Awards 2019
6. 2020 Corporate INTL Global Awards
7. Who's Who Legal 2019
8. 11th Annual HFM European Hedge Fund Services Awards in 2019

WE WON

Best Cyber Security Services Provider[4]

Best Compliance Consultancy Firm[5]

Thought Leader in Digital Forensics, Arbitration and Investigations[3]

International Mid-Market M&A Advisory Firm of the Year in Canada – 2020[6]

Thought Leader in Corporate Tax and Digital Forensics[7]

Best Valuations Firm for Hard-to-Value Assets[8]

Kroll recognized as Pacesetter in the ALM Intelligence: Cybersecurity Services 2020

Duff & Phelps and Kroll named **Best Compliance Consultant/Advisor**[10]

Recommended Vendor for Security Incident Response in Gartner® Invest Analyst Insight: SRM 2020 and 2019

9. America's Best Management Consulting Firms – Forbes
10. Compliance Week's 2020 Excellence in Compliance Awards
11. *IAM Patent 1000* 2020

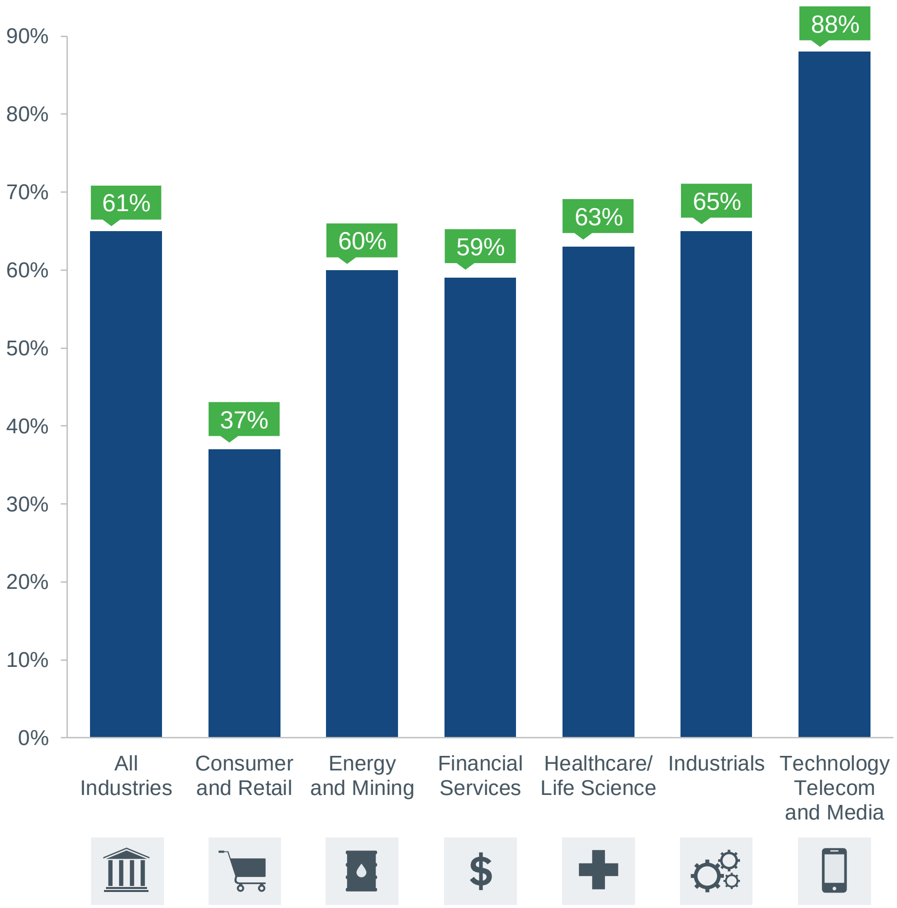
VALUATION PROFESSIONAL AFFILIATIONS

Respected across the globe for our expertise

Our managing directors provide input to regulators and standard-setters and actively contribute to the development of valuation industry best practices.

INDUSTRY EXPERTISE

SERVING 61% OF
FORTUNE 100 COMPANIES



SERVING 67% OF
EURO STOXX® 100 COMPANIES