LIBOR Transition

Presentation to AAE IC, PC and RMC Joint Meeting

2 April 2020

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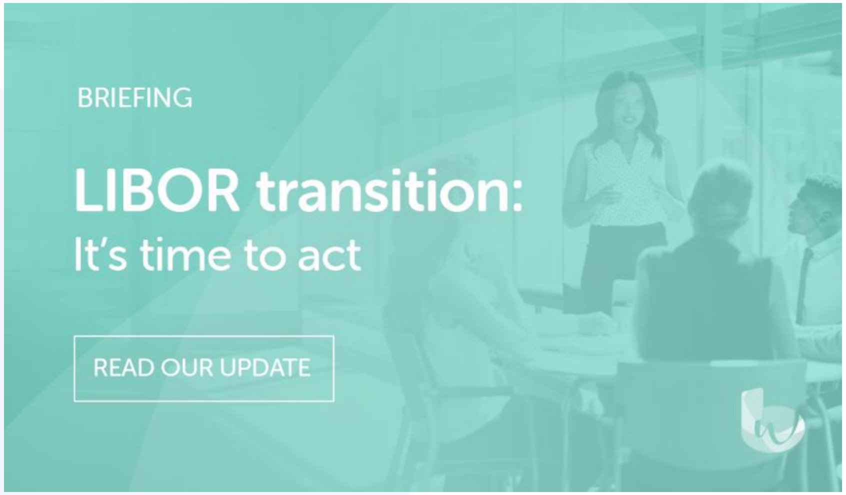
Agenda

- Introduction and Background
- Insurer technical provisions
- Hedging and other market issues
- Next steps



Presentation based mainly on Kemp, M.H.D. (2020) "LIBOR transition: It's time to act". *Barnett Waddingham*, https://www.barnett-waddingham.co.uk/comment-insight/briefings/libor-transition-its-time-to-act/

aae actuarial association of europe

Introduction

Introduction

- **LIBOR (London Interbank Offered Rate) and other 'IBORs'** being discontinued, replaced by alternative **(near) 'risk-free rates'** (RFRs)
- Money market instruments, fund benchmarks, policy documentation and derivatives that currently reference these IBORs need changing
  - c. **$200 – $300 trillion** in mortgages, consumer loans, corporate debt, derivatives and other financial instruments reference IBORs (*Source*: Morgan Stanley)
- Regulators in some jurisdictions (e.g. UK) pushing industry hard on preparedness
- EIOPA already has Solvency II specified RFRs which in part depend on IBORs, so **EIOPA RFRs will need changing**
  - EIOPA discussion paper currently open for comments (to 30 April 2020)
  - Potential for longer term impact on insurers' technical provisions

Background (1)

- LIBOR and other IBORs currently world's most widely used benchmarks for short-term interest rates
  - LIBOR reputedly initiated in 1969 when a Greek banker arranged a syndicated loan linked to reported funding costs of banks
  - Nearly 20 years later formalized by British Bankers Association, now administered by IBA. Rates averaged, adjusted and released at approximately 11.45 am London time each business day
  - Other IBORs developed in similarly ad hoc ways, sometimes retaining a connection with London-based financial markets
- Weaknesses highlighted during the 2008 Financial Crisis:
  - Decline in number of panel banks
  - LIBOR shown not to be 'risk-free'
  - Reliance on 'expert judgement' and conflicts of interest

Background (2)

- LIBOR is an ‘unsecured rate’. It diverged significantly from less credit-risky interest rate benchmarks during Financial Crisis
- Ways of mitigating the credit risk include:
  - Placing money only overnight (and moving the money to a new bank if the creditworthiness of the old one becomes impaired)
  - Lending money to banks only in a ‘secured’ manner, e.g. via repo or in some other collateralized manner
- Still some residual risks, so regulatory texts typically refer merely to **‘near’ risk-free**
- Regulators may retain flexibility to adjust methodology
  - E.g. UK planning to switch to SONIA. Involves (1) a ‘statement of methodology’ and (2) a ‘statement of intent’. The second allows Bank of England to alter methodology if it starts to diverge from being near risk-free

Proposals in different jurisdictions

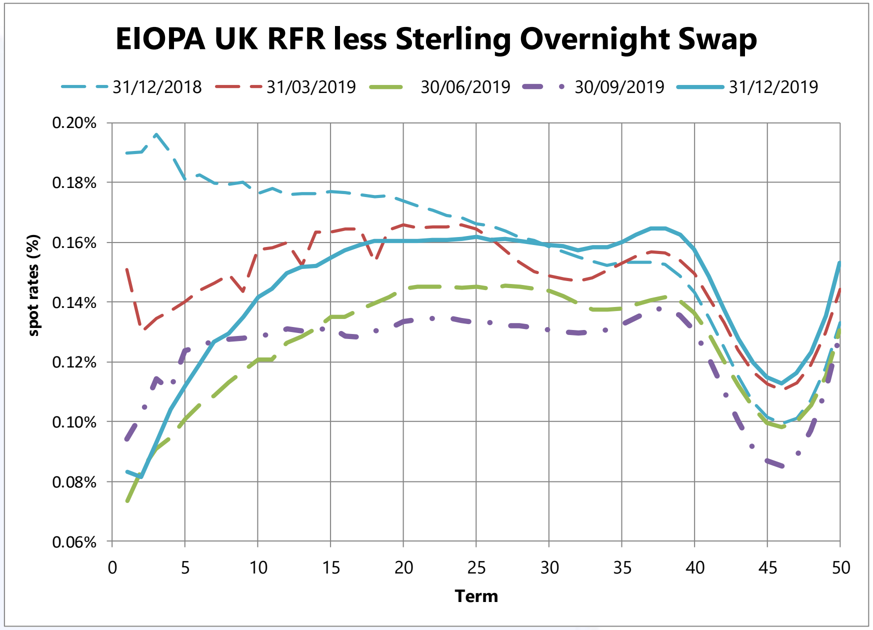
Country	LIBOR Rate	New (Near) 'Risk-Free' Rate	Transition Committee
United Kingdom	GBP LIBOR	SONIA	Sterling Working Group on Risk-Free Rates
Europe (Eurozone)	EURIBOR and EUR LIBOR	€STR	European Money Markets Institute (EMMI) and Euro RFR Working Group
United States	USD LIBOR	SOFR	Alternative Reference Rates Committee
Japan	TIBOR, JPY LIBOR and Euroyen TIBOR	TONA	Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks
Canada	CDOR	CORRA	Canadian Alternative Reference Rate Working Group (CARR)
Switzerland	CHF LIBOR	SARON	The National Working Group on Swiss Franc Reference Rates
Australia	BBSW	RBA Cash Rate (AONIA)	Australian Financial Markets Association
Hong Kong	HIBOR	HONIA	Treasury Markets Association's Market Practices Committee

Source; Morgan Stanley

Insurer technical provisions

Insurer Technical Provisions (TPs)

- Solvency II Best Estimate Liability calculated by discounting at **EIOPA RFRs**
- Even for countries (e.g. UK) deemed to have a deep, liquid and transparent overnight index swap (OIS) market, EIOPA RFR (no VA) currently diverges from market RFRs
  - Switch to SONIA as at 31/12/2019 would have modestly increased GBP TPs (some mitigation for longer-term business via Matching Adjustment)
- Also an issue for IFRS 17?



Source: Barnett Waddingham, Bank of England, EIOPA

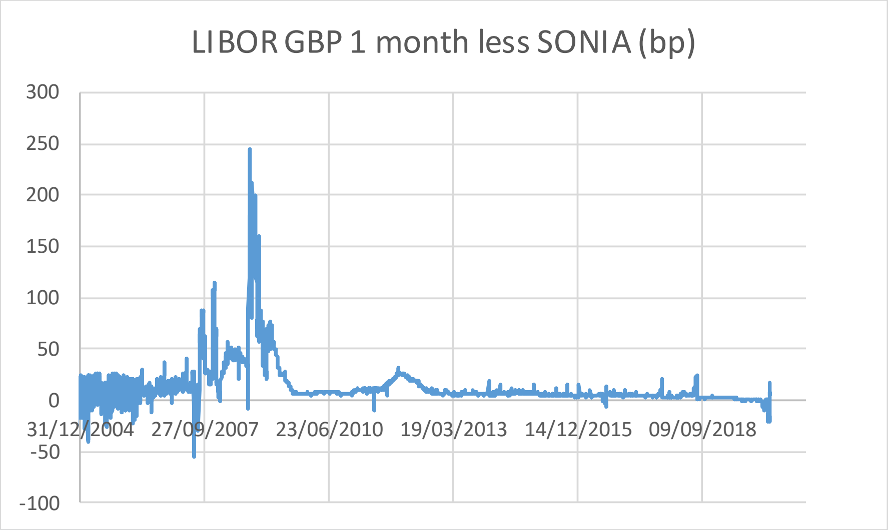
Hedging and other market issues

Hedging

- In theory, optimal insurer hedging (for GBP TPs) seems to involve:
  a) For Solvency II regulatory capital purposes: roughly 50% LIBOR-based swaps and 50% SONIA-based swaps (ignoring subtleties like some term differences and a 10 – 35 bp corridor)
  b) For economic purposes: depends on precise economics
- Recent EIOPA discussion paper floats likely aligning of EIOPA RFR with market RFR by time LIBOR transition completes
  – Probable need to migrate from LIBOR-based swaps to SONIA based swaps
  – But exactly when? EIOPA debating liquidity criteria
- Basis risk also potentially relevant
  – Likely rather binary for standard formula firms (depends on whether they meet the requirements to be allowed to disregard the basis risk involved)
  – More nuanced for internal model firms, but probable need to change model?

Other market issues: transaction pricing

- Switching from LIBOR to Overnight Index Swap (OIS) rates for floating leg of a swap introduces a need for a pricing adjustment, to avoid transfer of net value between parties
- Spread between the two can vary, particularly in times of crisis
- Supply and demand may work against institution if it waits too late to transition



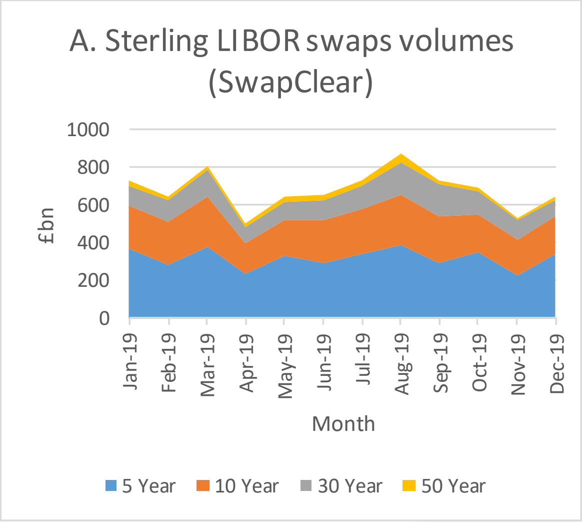
Source: Barnett Waddingham, Refinitiv

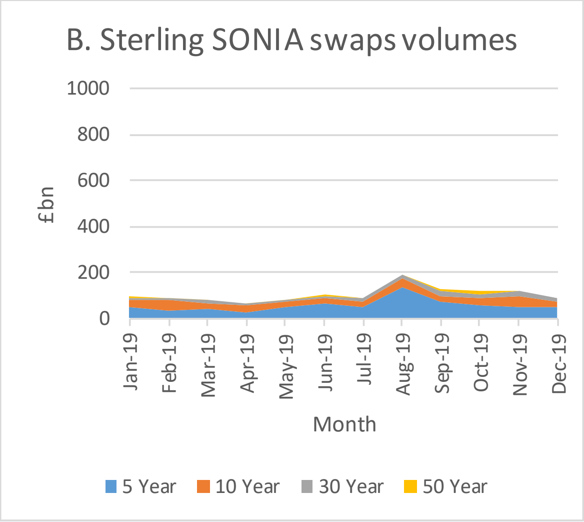
Other market issues: practicalities

- Standardized derivatives may be relatively easy to transition, e.g. via introduction to ISDA protocols
  - Although need to agree pricing adjustment if set in advance
  - Where relevant, UK practitioners seem to favour an adjustment based on historic median of spread
- More difficult can be many types of existing floating rate debt and loan instruments
  - Private placements: likely to know investors so easier to approach
  - Public placements: potentially more difficult, may require issuer buy back or consent solicitation

Market volumes shifting but not very quickly

- Shift towards OIS is happening but seemingly quite slowly (for maturities beyond 2 years)
- COVID-19 may stretch out this shift, although regulators (in e.g. UK) seem keen to ensure end point doesn’t move





Source: Kemp (2020), Barnett Waddingham and Kwaja, A. (2020). “Swaps data: have SOFR and SONIA swaps and futures lived up to expectations? Progress on volumes of SOFR and SONIA swaps and futures”. *Risk Magazine.*
Charts show Sterling LIBOR swaps volumes (SwapClear) and Sterling SONIA swaps volumes for maturities beyond 2 years.

Next steps

Next steps

- UK (and other) regulators emphasizing need for planning and action
- EIOPA discussion document:
  - EONIA ceased to exist 30 Sep 2019. Until end 2021 €STR (Euro Short Term Rate) and recalibrated EONIA (€STR plus fixed spread of 8.5 bp) both published, but only €STR from 3 Jan 2022
  - Discussion document focuses on how to address issues with EIOPA RFR methodology (and production of its figures), proposals aim to be generic and capable of being applied to all currencies
  - Likely alignment of **EIOPA RFRs** with **market RFRs** where they exist
  - Issue about when OIS based curves might reach EIOPA's **deep liquid and transparent** criteria and hence on **timing** of change
- Should AAE provide feedback on EIOPA's discussion document?
- Other issues for individual firms, e.g. policy documentation, fund benchmarks?

Summary

- **Introduction and background**
  - IBORs being phased out, need for action by firms to handle this shift, e.g. hedging positions, fund and contract terms
- **Insurer technical provisions**
  - Probable modest upward adjustment (or more significant if spreads expand)
- **Hedging and other market issues**
  - Volumes in OIS instruments taking some time to develop
- **Next steps**
  - EIOPA discussion document currently open – should we respond, what other issues do we see?