Minutes of the Working Group on Sterling Risk-Free Reference Rates

Wednesday 12th December 2018

FCA, 12 Endeavour Square, E20 1JN, London

Agenda

1. Welcome & introductions
2. Competition law reminder
3. Minutes of previous meeting
4. Presentation from Professor Darrell Duffie on RFR transition compression auctions
5. Term SONIA Reference Rate consultation next steps
6. Update on accounting impacts of RFR transition
7. Infrastructure priority list
8. Sub-group/taskforce/forum updates
9. Review of the year and handover to new Chair
10. AOB

Welcome, Competition Law Reminder and Previous Meeting's Minutes

1. The Chair welcomed attendees and reminded them of their responsibilities in relation to competition law and the importance of taking their own independent advice from the legal and/or compliance teams at their respective institutions.

2. The RFRWG members approved the minutes of the previous meeting.

Presentation from Professor Darrell Duffie (Stanford University) on RFR transition compression auction

3. The chair introduced Professor Darrell Duffie, who attended the Working Group as an observer to present his recent work on compression auctions[1].

4. Professor Duffie explained that a compression auction (or a cycle of such auctions) could reduce the amount of long-dated legacy LIBOR swaps, by converting centrally cleared contracts referencing LIBOR to contracts referencing a different benchmark (e.g. compounded SONIA). The algorithm would be both an auction mechanism (matching opposite positions to convert them) and a compression mechanism. Indeed, using input from participants (bids and offers) the mechanism would determine the compensation rate to be paid by LIBOR payers and received by LIBOR receivers when converting their contracts to the new (lower) benchmark. The mechanism would also increase conversion by allowing some substitutability between positions of sufficiently similar maturities, within risk tolerances specified by each participant.

5. He stressed that the official sector needed to be cognisant of the incentives for dealers (e.g. capital or margin implications), should consider recognising netting benefits to increase incentives to participate in such auctions and also suggested they consider how such auctions could operate within the relevant regulatory frameworks.

[1] See annex for slides

6. One member suggested that whilst compression techniques could be useful for risk reduction for centrally cleared contracts, it was not clear how a commensurate benefit might be derived for the uncleared market. Professor Duffie and the chair mentioned that the auction would concentrate liquidity and if successful would attract enough participants with offsetting LIBOR positions (payers and receivers) which would be matched and converted, therefore minimising any LIBOR risk to be warehoused. In a sequence of auctions, if there are imbalances over time (more payers seeking to convert at certain times, and more receivers seeking to convert at other times) providers of capital could usefully intermediate between payers and receivers.
7. Some members expressed support and commented that the auctions would be useful because they could provide price discovery and add transparency. However, there may be infrastructure hurdles to overcome for some market participants. Several other members thought that only dealers and some large asset managers would be able to participate directly in an auction and that non-cleared bilateral positions would not benefit from such auctions.
8. Some members mentioned that there would be an automatic conversion at a future trigger date (if fallbacks are inserted before then) and questioned the need for auctions. The presenter and other members outlined that there could be an auction or a cycle of regular auctions, and that if there was a demand for these services and if it was successful in drawing liquidity, then auctions might be a useful process.
9. The Working Group agreed to examine these techniques further.

Term SONIA Reference Rate 'TSRR' consultation next steps

10. The chair asked the Working Group for its view on the next steps on term SONIA reference rates (TSRR), following the consultation responses summary published in November. In particular, he asked for input on what the role of term rates would be and how any engagement with benchmark providers could work. Alongside this discussion, a high level draft statement on next steps from the Working Group was submitted. The draft statement thanked respondents to the consultation, emphasised the view that its use in derivatives products was not desirable and noted the importance of a TSRR being robust[2]. One member mentioned that an administrator was already publishing a prototype[3].
11. The FCA stated that it was supportive of the development of a term rate if feasible, but noted that there may be risks associated with the methodology recommended by the consultation, since it would currently be based on a low number of transactions and a large concentration (i.e. only a small number of market participants in spot OIS trades at the moment). There was also inertia to transition to available RFRs due to the prospect of term rates being made available. The Working Group discussed that there may be a need to call out the risks related to term rates as part of the discussion on whether they were needed.

---

[2] The statement has since been published and can be found at https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/risk-free-reference-rates-new-issuance-of-sterling-bonds-referencing-libor.pdf

[3] https://www.theice.com/marketdata/reports/244

12. Members agreed with the consultation summary that the use cases for TSRRs were specific to the cash market. Some members pointed out that if the commercial incentive was low, TSRR may not develop at all. One member pointed out that the consultation was suggesting a TSRR may be available in 2019 subject to the outcome of the consultation, and highlighted that it was likely that the Working Group would be asked if that timing was still the objective.

13. The Working Group discussed that it would be helpful to encourage the usage of RFR as much as possible and not to delay adoption due to development of potential TSRR. One member suggested it should be made explicit that the Working Group was calling on financial providers to work on SONIA linked products (i.e. products referring to the overnight rate).

14. There was a suggestion to restart the term rates sub-group with the new mandate of catalysing the implementation of a TSRR. The decision on this was deferred to the next RFRWG meeting.

Update on accounting impacts of RFR transition

15. The vice chair updated the group on a roundtable organised between RFRWG representatives and technical specialists across banking and corporate sectors from 6 accounting firms[4]. The purpose of this was to discuss the key accounting issues with respect to the transition and how the Working Group could engage on these issues. The key topics discussed in this meeting were as follows:

    a. As LIBOR was still a liquid benchmark, it was highly likely that market structure would continue to be based on LIBOR for the short term. However, as various aspects of transition begin to progress (e.g. implementation of fallback clauses in legacy positions), this might not be the case in the future.

    b. The meeting attendees discussed that there may be issues arising in hedge documentation modification if there was no clarity to what it should be modified to, or no mandate from regulators to account for LIBOR transition and possible discontinuation.

    c. The probability of cash flows was also discussed as a possible issue to emerge during the transition period.

16. The accounting firms had recommended that the Working Group engage with the IASB, and mentioned that any clarification in 2019 on accounting would be helpful. They also encouraged the RFRWG to continue considering outreach to IASB, for example via a letter, as discussed by the Working Group at its August 2018 meeting[5].

17. The vice chair noted that IASB had published a board paper[6] the previous week on the outcome of their research project (this was included in the material for the meeting). The Working Group members welcomed the paper and the chair highlighted that it was a constructive document which captured the key issues that may arise during the transition.

18. The Working Group was updated on the drafting of a letter to the IASB and was asked to provide comments on the preliminary version, for the letter to be ready to send early Q1 2019. It was discussed

[4] Ernst & Young, KPMG, BDO, PWC, Grant Thornton and Deloitte

[5] https://www.bankofengland.co.uk/-/media/boe/files/minutes/2018/rfr-august-2018.pdf

[6] https://www.ifrs.org/-/media/feature/meetings/2018/december/iasb/ap14-ibor-reform.pdf

that the letter introduction should be modified, depending on the outcome of the IASB board meeting, which would approve or reject the proposals in the paper.

Infrastructure priority list

19. The Working Group was asked to provide comments on the infrastructure priority list, in order for it to be published as a standalone document in December[7]. One member suggested that priority 1.c should be expanded to include concrete examples of helpful data, such as comparison between base rate vs. compound SONIA vs. LIBOR and other useful historical data and trends.

20. The Working Group approved the infrastructure sub-group plans for an outreach event for infrastructure and technology firms early next year.

Sub-group, task forces and forum updates

Bank Forum

21. The RFR Secretariat updated on a short survey run on the Bank Forum, seeking their views on legacy conversion mechanisms, and seeking updates on RFR options market developments.

22. There had been a small number of responses to the survey. With respect to the legacy conversion mechanisms, those who responded were generally supportive of auctions as legacy conversion / risk transfer mechanisms. Such mechanisms were viewed as potentially helping price discovery and creating RFR trading activity. However some challenges were pointed out, including:

- Interlinkage with the ISDA fallback for derivatives.
- Potential complexity of setting/building the infrastructure to participate in such mechanisms.
- Difficulty for small firms to participate.

23. A few respondents suggested compression could be a useful tool to reduce the size of the legacy book. Others were of the view that an auction did not need to be bundled with compression.

24. With respect to RFR referencing options, respondents listed developing new market conventions, updates to systems and fallbacks amongst work to be done to enable a robust options market to emerge. Two responses mentioned that exchanges can play a role in the development of RFR based options, with one suggesting that a first step in evolving options' liquidity would be the listing of exchange traded futures options. There was a suggestion that Options and non-linear products should be in the RFRWG work plan for 2019.

Investment management forum

25. The Working Group was updated on the last investment manager forum. The forum discussed and agreed to communicate to the Working Group the following points:

    a. The importance of finding a solution for the insurance sector which currently have to use Solvency II discounting curves derived from LIBOR instruments. Insurers flagged to the forum that they may be disadvantaged as a sector and that there could be bifurcated/extreme moves if different sectors transition at different times.

[7] Subsequently published after the meeting at https://www.bankofengland.co.uk/-/media/boe/files/markets/benchmarks/infrastructure-and-systems-preliminary-priority-list.pdf

b. Following the bonds sub-group update on conversion options for legacy instruments at the forum, a discussion ensued on whether the various trade associations could help convening investors/insurers for consent/terms of agreement solicitations.

c. It was noted that the legacy conversion options being discussed by the bonds sub-group will be challenging for structured notes and that non market solutions should also be considered (e.g. legislation)

Pension Funds & Insurance Company sub-group

26. The sub-group chair mentioned that it was still examining ways to organise pan-European work in relation to the insurance task force. The RFR Secretariat mentioned that the Working Group in establishing a work plan for next year will consider whether a task force on the topic is to be formed with the EUR group or whether an international sub-group on regulation matters should be suggested to other NWGs.

Loan market sub-group

27. The sub-group chair mentioned that the focus of the sub-group was to continue working on potential fallbacks in legacy contracts that could be either based on compounded overnight or term rates. She reiterated the sub-group view that TSRR would be needed for both legacy and new contracts and notes that the sub-group was working on the list of priorities for next year.

Bond market sub-group

28. The bonds sub-group was continuing their work on possible market-based solutions for legacy conversions for the bonds market. The sub-group chair estimated the post-2021 legacy residual for floating rates notes at around $850bn (across all LIBOR currencies).

Communications & Outreach sub-group

29. In the absence of the sub-group chair, the RFR Secretariat provided an update on recent discussions from the sub-group about next steps, now that the starter pack and first RFRWG newsletter had been published. This included the suggestion that a Working Group event could be organised at the right juncture next year. The first newsletter had been well received, and the second newsletter was expected for 21st December. Members were encouraged to disseminate the newsletter and starter pack as widely as possible.

Cross-currency swap sub-group

30. The chair and the RFR Secretariat referred to the paper shared by the FRB and the ARRC with all the NWGs involved in the cross currency task force. The Working Group was asked to provide feedback by the 1st week of January.

Task force on conventions

31. Following feedback from the task force, the discussion paper on pros and cons for conventions was updated and circulated to the task force. The next steps included appointing leads from those who volunteered and producing a more succinct new draft that would capture considerations around loans conventions as well as FRNs.

Review of the year and handover to the new Chair

32. The chair provided an outline of the year, highlighting that the Working Group had moved from a membership of 16 banks to involvement of around 130 firms. He commended all the members for their engagement and effort in raising awareness, and on the deliverables achieved in 2018. This year has seen good momentum and had set the ground work to enable an orderly transition. 2019 should be an implementation/execution year of some of the agreed actions. He suggested in particular that the outcome of the Dear CEO letter and the delivery of a communication and outreach strategy would be important.

33. The chair – Francois Jourdain – then handed over to the new chair – Tushar Morzaria – and welcomed him to the effort on LIBOR transition. He thanked the RFR Secretariat, the Barclays team and the RFRWG members for their work, enthusiasm and collaboration.

34. The FCA and the Bank thanked Francois Jourdain for his efforts, drive and leadership for the market-led LIBOR transition work and stressed that he was one of the key actors globally on this topic.

35. The new chair conveyed his thanks to Francois and his acceptance of the role. He said that he was looking forward to working with the group and the secretariat to build on the significant efforts to date, and emphasized the need to maintain momentum, whilst framing the right structure and roadmap to drive heightened execution focus in 2019.

Private sector attendees

Francois Jourdain	**Barclays (Chair)**
Andreas Giannopoulos	**Barclays (Chair's office)**
Paul Mansour	**Barclays (Chair's office)**
Frances Hinden	**Shell (Vice Chair)**
Tushar Morzaria	**Barclays (new chair, only last 2 agenda items)**
Sarah Boyce	**Association of Corporate Treasurers**
Nick Saggers	**Bank of America Merrill Lynch**
Jonathan Brown	**Barclays**
Michael Barron	**Deutsche Bank**
Axel van Nederveen	**European Bank for Reconstruction & Development**
Chirag Dave	**Goldman Sachs**
Daniele Forni	**HSBC**
Chris Rhodes	**ICE Group (phone)**
Paul Richards	**ICMA**
Robert Gall	**Insight Investment**
Ross Barrett	**Investment Association**
Rick Sandilands	**ISDA**
Scott O'Malia	**ISDA (phone)**
Guy Whitby Smith	**Legal & General Investment Management**
Clare Dawson	**Loan Market Association**
Philip Whitehurst	**London Stock Exchange Group (phone)**
Ian Fox	**Lloyds Banking Group**
Kieran Higgins	**Royal Bank of Scotland**

Official sector attendees

Andrew Hauser	**Bank of England**
Antoine Lallour	**Bank of England**
Alastair Hughes	**Bank of England**
Jugvinder Singh	**Bank of England**
Sakshi Gupta	**Bank of England**
Imane Bakkar	**Bank of England**
Edwin Schooling Latter	**Financial Conduct Authority**
April Richardson	**Financial Conduct Authority**
Devid Mazzonetto	**Financial Conduct Authority**
Toby Williams	**Financial Conduct Authority**
Richard Fox	**Financial Conduct Authority**

Observers

Darrell Duffie	**Stanford University (agenda item 4)**

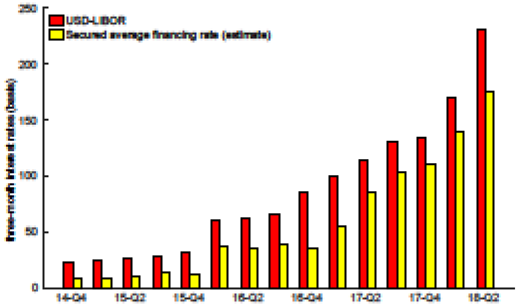
Annex 1: Slides for Item 4

Compression Auctions:
Converting swaps to new reference rates

Darrell Duffie
Graduate School of Business, Stanford University

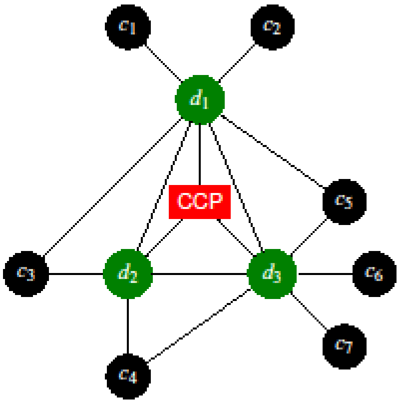
UK Working Group on LIBOR Transition
December 2018

3mo LIBOR and estimated 3mo compounded SOFR

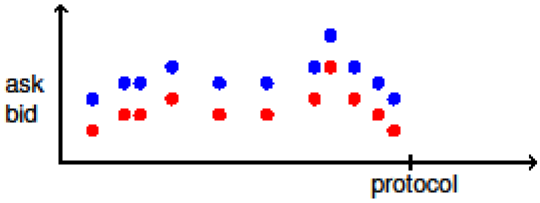


Data: FRBNY and Bloomberg.

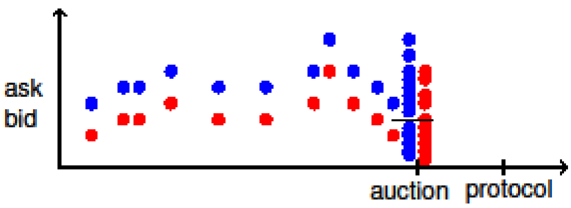
An auction to convert centrally cleared derivatives



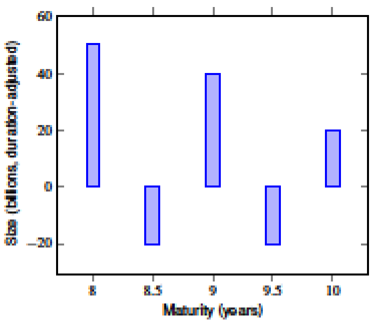
Market depth is limited at any point in time

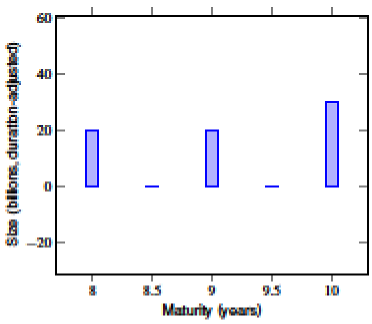


Market is depth is increased by an auction

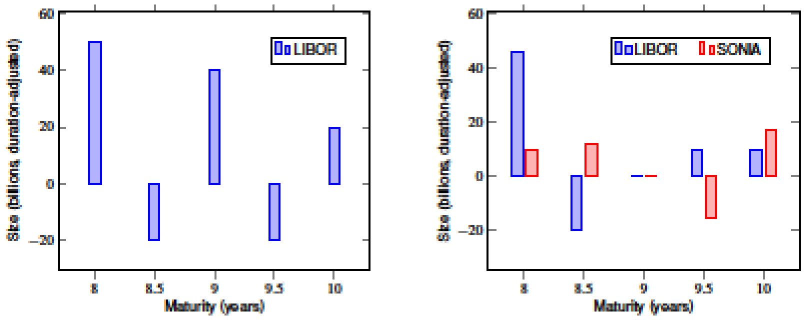


Example: A dealer's LIBOR swap positions Before and after conventional compression





LIBOR and SONIA swap positions before and after compression



Example: A dealer's bids and offers in a compression auction

	LIBOR offer	LIBOR bid	SONIA offer	SONIA bid
8 years	310.1	310.0	290.1	289.9
8.5 years	312.5	312.3	292.2	292.0
9 years	315.4	315.2	295.5	295.3
9.5 years	324.3	324.1	305.0	304.8
10 years	330.1	329.9	311.8	311.6

Overview of a compression-conversion auction design

- Each participant submits:
  1. A list bid and offer rates for LIBOR swaps, by maturity.
  2. A list of bid and offer rates for SONIA swaps, by maturity.
  3. Risk tolerances for changes in duration (both LIBOR and net), by maturity bucket.
- The CCP (or its agent) solves an optimization problem: Find the allocation of LIBOR and SONIA swaps to bidders that minimizes a weighted sum of (a) gross notional LIBOR (b) total gross notional LIBOR and SONIA, subject to:
  1. compatibility with all bid and offer rates and all risk tolerances.
  2. market clearing: exact CCP balanced positions for each swap type, each maturity.
  3. budget balance: possibly allowing for balanced up-front payments in a discriminatory-price auction format.