

May 2019

Preliminary Recommendations for Interdealer Cross-Currency Swap Market Conventions

Developed for Wider Consultation by the Market Structures Working Group of the Alternative Reference Rates Committee in Cooperation with other National Working Groups and Associations

Introduction

In August 2018, the Market Structures working group of the Alternative Reference Rates Committee (ARRC) formed a subgroup of buy side, sell side, and intermediary market participants to discuss potential technical specifications for interdealer trading of cross-currency basis swaps that reference overnight risk-free rates (RFRs) designated by the ARRC and similar National Working Groups (NWGs) in other jurisdictions. Members of several other NWGs participated in this work, including the Sterling Risk-Free Rates Working Group, the Swiss National Working Group, the working group on euro risk-free rates, the Cross-Industry Committee on Japanese Yen Interest Rate Benchmarks, and the Canadian Alternative Reference Rates Working Group. The Australian Financial Markets Association, the International Swaps and Derivatives Association (ISDA), representatives of a number of central banks, clearing and settlement infrastructure providers, and participants in other markets also joined in the subgroup's discussions.

The aim of this document is to summarize the subgroup's work to date and to encourage other market participants to provide feedback on potential conventions for interdealer trading of RFR-RFR and RFR-IBOR cross currency swaps. In addition, the group has discussed with ISDA the potential benefits of a template that would allow market participants to ensure, if they desired to do so, that both legs of a legacy cross-currency swap referencing IBORs would move to successor rates at the same time.

The group is working with several industry trade associations to receive wider feedback from market participants on this document and the market conventions described herein. Any final recommendations of the ARRC with respect to any such market conventions will be for the market's consideration only; the counterparties to any given contract will ultimately determine for themselves the contract's specifications and whether or to what extent any recommended market conventions are adopted.

1. Potential conventions for an RFR-RFR dealer-to-dealer cross currency basis swaps

Current cross-currency swap markets are well established and typically based on LIBOR (or similar) interest rate benchmarks. As RFR single currency markets develop, corresponding cross-currency markets will need to develop as well to complement and support the use of RFRs. While

there are pre-existing cross-currency swap markets based on overnight rates (for example, cross-currency swaps based on EONIA and the effective federal funds rate), these instruments are not widely traded or very liquid and tend to be used in dealer-to-customer trades rather than in interdealer transactions.

The conventions and options proposed below were developed in the context of dealer-to-dealer transactions. End users in the subgroup noted that they frequently negotiate bespoke terms for cross-currency and other swaps to meet their underlying needs, and that any conventions recommended or adopted for interdealer transactions may not be suitable for dealer-to-customer or customer-to-customer transactions. For that reason, the conventions described herein are intended for dealer-to-dealer transactions; they are not, however, intended to suggest that swaps traded pursuant to these conventions should trade on any particular platform or that customers could not directly trade swaps with these terms. In addition, the conventions described in this document are aligned with underlying single-currency RFR market conventions to minimize operational issues in implementing RFR cross-currency markets. Some of the suggested conventions are very similar to current Libor-based markets while others can differ. For example, principal (notional) exchanges would be very similar, but interest payment lags for compounded RFRs could differ.

In the subgroup's opinion, it is important to emphasise that dealer-to-dealer transactions should be as uniform as possible across currencies where RFRs are expected to be the dominant benchmarks to avoid unnecessary operational complexities, allow for easier hedging, and keep costs contained. It is also preferable to keep the variants of dealer-to-dealer swaps across a given currency pair (e.g. SOFR/SONIA) to a minimum to limit market fragmentation that could compromise liquidity.

The dealer-dealer conventions could then be a basis for pricing other structures for end users. This is common practice today in which many auxiliary structures are built on liquid, traded dealer-to-dealer markets to accommodate and serve the needs of end users. This could potentially include bespoke trades referencing the forward-looking term rates that some NWGs have indicated may be produced based on derivatives markets referencing RFRs, although as mentioned earlier the scope of this current note is only on potential specifications for RFR-based swaps and not on other structures.

The potential conventions and options for liquid, RFR-based dealer-dealer transactions are described below, and end-user structures could be readily derived from the proposals.

Potential conventions

1) Frequency of payments

It was thought that quarterly payments on each leg would align well with current Libor-based markets and the likely structure of standard OIS swaps referencing RFRs. Participants in the subgroup's discussions felt this appeared to be well supported and that quarterly payments on each leg of the swap could be recommended as a standard.

2) *Exchange of notional principal cash flows*

Participants in the subgroup's discussions felt that it was appropriate to align with current principal exchange conventions and that therefore exchange of notional principal cash flows at the start and maturity dates of the swap could be recommended as a standard.

3) *Interest convention*

Because underlying, single currency OIS markets use compounded averages of daily rates settled in arrears, participants in the subgroup felt that compound daily settled in arrears could be recommended as a standard using the day count convention of the underlying OIS market of each currency (i.e. act/360 or act/365).

4) *Alignment of payment or rate fixing dates*

OIS markets have differing payment lags (e.g. T + 2 for USD and T + 1 for EUR). This means, in practice, that alignment of dates for interest payments and daily rate sets is not possible for many currency pairs. Either the interest payment days would differ (based on the payment lags) or the rates set dates would differ (offset by the payment lags).¹

Note that this rate-set date issue is also present in the current Libor markets, where some currencies rate set 2 days prior to the relevant period while others have a 1 or 0 day setting. While any decision needs to weigh the importance of alignment of rate set dates against the operational and credit implications of differing payment dates, participants in the subgroup discussions believed that it was important to avoid the credit risk that would be generated if payment dates did not align if notional principal was exchanged. Therefore, the subgroup felt that moving payment lags where necessary in order to achieve alignment of payment dates could be recommended as a standard.

5) *Spot (2 business days) start*

Participants in the subgroup discussions felt it was appropriate to align with current market conventions and that a spot (2 business days) start could be recommended as a standard.

¹ Some recent dollar FRN issuances have utilized a lockout period (freezing the last several days of compound interest at the published value of the overnight rate at the time the lockout period begins) rather than or in addition to a payment lag. Potentially market participants could consider this option as well. As well, this issue could be addressed if there were standardized terms for payment lags across OIS contracts in different currencies.

6) *Reset of notional principals*

Resetting notional principals each quarter to current FX rates in order to keep mark-to-market valuations is often used in current markets. Many of the participants in the subgroup believed that this is a key tool in reducing counterparty credit exposures and that it would likely be typically adopted in interdealer RFR-RFR markets. However, it was noted that other tools for reducing counterparty credit exposures develop over time, such as greater use of central clearing for cross-currency swaps or greater standardization of credit support annexes (CSAs), and also that in some circumstances cross-currency basis swaps were used to hedge cash instruments that did not have quarterly resets and that in such circumstances it could be reasonable to forgo this type of convention.

While most participants in the subgroup felt that quarterly resetting of notional principals would likely become a de facto standard in many cases, the group felt that it was not necessary to recommend a standard on reset of principal, instead leaving options open.

7) *Discounting and PAI*

There are currently no explicitly-stated market practices for discounting and price alignment interest (PAI) in the cross-currency market. While in many instances dealers use the U.S. dollar (USD) effective federal funds rate as the basis for discounting in collateral calculations, this is not uniform and can depend on the terms of individual CSAs. Although there would be some benefit to a homogenous approach to discounting and PAI, the subgroup recognized that there are often sound reasons for heterogeneity and that ultimately these choices would need to be based on the needs of the counterparties involved. The participants in subgroup discussions therefore felt was not necessary to recommend one standard for discounting and PAI.

As a matter of practice, however, there should be a standard convention for *quoting* prices in these markets. It was thought likely that quoting prices based on USD discounting and PAI would remain the norm, although other standards could potentially be as efficient.

2. Potential conventions for an RFR-IBOR dealer-to-dealer cross currency basis swaps

If there is a liquid base RFR in both currencies, then dealers would be more likely to enter in to a RFR-RFR cross-currency swap and then a RFR-IBOR basis swap, rather than to engage directly in a cross-currency basis swap between and an RFR and an IBOR. However, in some currencies, there may be no liquid RFR or for other reasons a term IBOR may remain as the base liquid interest rate benchmark. Use of a RFR-IBOR cross currency swap in the dealer-to-dealer

market would therefore likely only be in such circumstances, where an RFR was the base liquid benchmark in one currency and the IBOR remained the base benchmark in the other. This may be the case for cross-currency swaps between many of the LIBOR currencies, where RFRs are expected to become the dominant liquid base rate, and some EMEs, which may only have IBORs available.

Subgroup participants went through the exercise of booking a hypothetical trade confirmations based on one currency expected to rely fully on an overnight RFR and an EME currency with only an IBOR. Going through the exercise made it clear that using the standard conventions that suggested above for an RFR-RFR swap in the RFR leg and what is currently used for an IBOR-IBOR swap for the IBOR leg seemed to work in a natural way.²

Going through the exercise also pointed to some of the problems cash products have been grappling with in terms of how many days in advance of payment are needed to be sure that counterparties could make the required payments (both the cross-currency swap and any related hedge payments). Although some RFR floating-rate debt issuances in the United States are using a lockout (defined as freezing the daily rate for the last several days of an interest period at the last rate published), similar issuances in other jurisdictions are using a lookback (defined as using the RFR rate published a pre-determined number of days ago for the current day's interest) and it was felt that this was easier to incorporate in to the cross-currency swap market. A lockout is not consistent with the current ISDA definitions of compound RFRs. While ISDA could create different definitions that allows for options like this or for use of daily rates with a daily reset period in a simple averaging framework, using the most standardized structure was seen as having the greatest chance of creating a liquid interdealer market.

Based on this, the subgroup developed the following recommendations for wider consultation. As above, any recommendations are intended for the dealer-to-dealer market, recognizing that dealer-to-customer arrangements may be varied and depend on the needs of the customer:

Potential conventions

1) Conventions for the RFR leg

As a standard, the RFR conventions in the RFR-IBOR cross currency market should match RFR accrual conventions which develop in the RFR-RFR cross currency market and which are discussed in the previous section.

² For certain EME currencies, cross-currency swaps that involve exchanging a fixed rate for a floating rate in another currency may also be used. Using the same principle, the recommendations for RFR legs discussed in this document could also be used for the floating-rate legs in these fixed-floating cross currency swaps.

2) *Conventions for the IBOR leg*

As a standard, the IBOR leg of the RFR-IBOR cross currency market should match the conventions developed in the related IBOR currency.

3) *Aligning Accrual Conventions with Cash Products*

In certain circumstances, RFR accrual conventions may develop to include lookback periods or lockout periods. Such conventions would facilitate alignment of principal and interest and alignment with conventions in cash markets. As a matter of convenience, these may also be adopted in cross-currency swap conventions, although it is too soon to say how this will develop. Note however, that because IBOR is a forward looking rate and overnight RFRs are based upon realized rates, incorporating certain conventions in the RFR leg might lead to additional basis or convexity.

3. Potential fallbacks for cross-currency swaps currently referencing IBORs

Current cross-currency swap markets will be impacted as the use of LIBOR is expected to fall prior to 2021. If counterparties transition from Libor to RFRs (because fallbacks are triggered or they otherwise agree to change the reference rate in their contracts) they will need to decide whether to move both benchmarks (i.e. both legs of the swap) or just the impacted leg only. This will likely be a matter for the counterparties to agree on an individual basis depending on the circumstances involved. Under the definition changes contemplated by ISDA, a given leg of a cross-currency swap referencing two IBORs would trigger and fallback to the designated RFR successor rate if that given IBOR permanently or indefinitely stopped publication, but the other leg would remain referencing its IBOR for as long as that rate remained in production. However, ISDA has agreed to consider offering templates that would allow counterparties to agree that both legs of the cross-currency swap would trigger in these circumstances or in other circumstances that the counterparties agree.