NZFMA Consultation

Proposed Inter-Dealer Cross Currency Swap Markets Conventions for Risk Free Rates

November 2020

New Zealand Financial Markets Association

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Submission contact details

The New Zealand Financial Markets Association (NZFMA) invites submissions on this consultation document by 5.00pm on Friday, 11 December 2020.

Address submissions and enquiries to:

(Email)
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Subject line: Inter-Dealer Cross Currency Swap Market Conventions for Risk Free Rates

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Submission Results

The NZFMA will keep all individual submissions confidential. It will however publish an anonymised summary of the submissions as soon as possible after the closing date.

Introduction

In January 2020 the Alternative Reference Rate Committee (ARRC)[1] published recommendations for Inter-dealer Cross Currency Swap Market Conventions. This publication was the result of work undertaken by the Market Structures Working Group along-side National Working Groups to recommend possible conventions for Cross-Currency swap markets given the evolution of Risk-Free-Rates (RFR) in the lead-in to the LIBOR cessation in December 2021.

The final recommendations detail conventions for both RFR/LIBOR and RFR/RFR based currency pairs. The ARRC notes that, in some instances, a range of potential conventions could be considered, however, over time it is expected that the market will ultimately decide on final market conventions for these products as liquidity develops in RFR product across the board. Appendix one contains a summary of the ARRC recommendations and how they were applied to the proposed conventions in this document.

It is important to clarify that in a New Zealand context, the interest rate benchmark BKBM is not considered a benchmark that will cease in the foreseeable future.

Impact

There is a strong expectation from Regulators that USD and GBP LIBOR benchmarks will not occur in new derivative contracts past June 2021. Therefore, it is likely that participants in the Cross-Currency Swap market may look to move away from LIBOR based fixings on the USD leg of the swap as preferences for the USD Secured Overnight Funding Rate (SOFR) benchmark evolve.

To facilitate the move, it is important that the conventions that govern any new RFR based product are well established and clearly defined at the inter-dealer level. This will provide the commonality required to provide price quotations and will form the basis against which closing prices can be submitted. The latter being essential to the overall development of the market as it will allow for the market valuation of these transactions.

Next Steps

The NZFMA currently publishes a range of closing prices, including a Cross-Currency basis curve based on traditional 'IBOR' benchmarks. However, as RFR based Cross-Currency swaps entail a

[1] The Alternative Reference Rates Committee (ARRC) is a group of private-market participants convened by the Federal Reserve Board and the New York Fed to help ensure a successful transition from U.S. dollar (USD) LIBOR to a more robust reference rate, its recommended alternative, the Secured Overnight Financing Rate (SOFR). The ARRC is comprised of a diverse set of private-sector entities that have an important presence in markets affected by USD LIBOR and a wide array of official-sector entities, including banking and financial sector regulators, as ex-officio members.

change in the underlying benchmark of the product, a new RFR based Cross-Currency swap closing curve will be required to support the evolution of this market.

The purpose of this consultation is:

1) to establish the NZFMA position on the required conventions against the published ARRC recommendations. In doing so it is important to note that consistency across product and currency markets is an important consideration for the ongoing development of overall liquidity; and,
2) Discuss the evolution of a new RFR based Cross-Currency swap closing curve that will be required to support the evolution of this market

Whilst it is important to clearly define the conventions that form the basis for inter-dealer transactions, this would not preclude other conventions being entertained to meet the requirements of clients on a bi-lateral basis. Such transactions would be priced accordingly – potentially as a spread to interdealer quoted markets.

Questions

I. This consultation discusses the establishment of RFR/RFR cross-currency swaps in New Zealand and the conventions that should apply to the NZ dollar leg. Do you have any comments related to this proposal?

II. Do you agree that the NZFMA needs to establish a closing rate curve for RFR/RFR cross-currency swaps? If so, what tenors would be required?

Proposed NZFMA Conventions for Cross-Currency Swaps

The following NZFMA proposed conventions have been formulated based on the ARRC recommendations and should be read in conjunction with that document. Greater detail against the ARRC recommendations is provided in appendix one.

For the purposes of this consultation, the proposed conventions are outlined as:

Convention One: NZFMA Interdealer Cross-Currency Swap transactions are priced and executed on an RFR/RFR basis.

Convention Two: Quarterly interest payment frequencies on both sides of the swap are observed.

Convention Three: Exchange of notional principal payments should occur on the Settlement and Maturity dates of the swap.

Convention Four: Interest should be calculated on compound daily settled in-arrears basis as per the existing ISDA definitions for the respective SOFR and NZIONA legs of the swap. Day count conventions of act/360 and act/365 should be applied to the USD and NZD legs of the swap respectively.

Convention Five: Interest payment dates for each leg of the swap should occur on a T+2 basis.

Convention Six: Transactions be based on a spot (2 business day) settlement.

Convention Seven: Transactions should be priced, based on the principal of quarterly principal reset, recognising that this may not always be appropriate.

Convention Eight: Resetting the FX rate should occur 2 business days prior to the next interest calculation period, with interim principal exchange occurring on the interest calculation period end date.

Convention Nine: Interdealer prices should be quoted on USD currency collateral discounted on an Effective Federal Funds Rate basis – noting that the form of Price Alignment Interest may evolve over time.

Question
III. Do you agree with all of the proposed conventions noted above? If not, can you please highlight the conventions where you believe there is an issue, provide an explanation and the changes required?

NZFMA

Appendix one

The ARRC Recommendations

In general, the ARRC recommendations are based on maintaining consistency, where appropriate, to both existing RFR based derivatives; and existing IBOR based Cross-Currency swap conventions. This approach should allow for simplicity in hedging across derivative products whilst avoiding the introduction of additional operational complexity to the product.

The ARRC recommendations provide conventions for currency benchmark pairs on both an RFR/RFR basis and an RFR/IBOR[2] basis

Although conventions for both can be considered, given the goal is to derive one set of conventions for the purposes of interdealer trading and pricing it is recommended that Cross-Currency Swap conventions in a NZ context are undertaken on an RFR/RFR basis. Specifically, SOFR against NZIONA[3] for a USD to NZD Cross-Currency Swap. The rationale for this recommendation being:

1. This approach removes the pricing complexities involved in embedded asymmetric bank credit, implicit in the pricing of BKBM, on the NZ side of the Cross-Currency swap when an equivalent does not exist for SOFR. This has benefits from a valuation and hedge accounting perspective.
2. The approach allows for more consistent alignment of interest payments across both legs of the swap without undermining existing RFR conventions
3. This approach does not remove a counterparties ability to achieve a 'BKBM'[4] result as this can be achieved via a single currency basis swap. Conventions for this are well established and such a trade can already be transacted on a cleared basis.

Convention One: NZFMA Interdealer Cross-Currency Swap transactions are priced and executed on an RFR-RFR basis.

The ARRC recommendation for RFR/RFR based Cross-Currency swaps outlines a further seven conventions for consideration.

Frequency of [Interest] Payments

The ARRC recommendation is for transactions to be *based on quarterly payments for each leg of the swap* to align with standard OIS referencing derivative transactions.

Convention Two: Quarterly interest payment frequencies on both sides of the swap are observed.

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2 IBOR is a generic term for 'LIBOR' based benchmarks. In this scenario BKBM would be the equivalent 'IBOR'

3 NZIONA is the ISDA defined compound index for the NZD OCR which is currently used as the benchmark for NZD OIS trades. The NZD OCR has also been selected as the NZD fall-back rate for BKBM.

4 This approach does not preclude the pricing of SOFR-BKBM on a bi-lateral basis

Exchange of Notional Principal Cash Flows

The ARRC recommendation is for *exchange of notional principal payments at the start and maturity dates of the swap* to occur. The treatment is consistent with the current principal exchange conventions for 'IBOR' based Cross-Currency swaps.

Convention Three: Exchange of notional principal payments should occur on the Settlement and Maturity dates of the swap.

Interest Convention

The ARRC recommendation is that transactions be based on compound daily settled in arrears using the day count convention of the underlying OIS market of each currency (i.e. act/360 or act/365). The treatment is consistent with existing OIS market derivative transactions and the convention is supported in existing ISDA definitions.

Convention Four: Interest should be calculated on compound daily settled in-arrears basis as per the existing ISDA definitions for the respective SOFR and NZIONA legs of the swap. Day count conventions of act/360 and act/365 should be applied to the USD and NZD legs of the swap respectively.

Alignment of Payment or Rate Fixing Dates

The ARRC recognises several, potentially mutually exclusive, objectives need to be considered in contemplating this convention. Specifically:

1. A desire that the calculation and payment of Interest for each leg of the Cross-Currency swap to remain consistent with that of the underlying RFR based derivative for each respective currency. This will allow for alignment of hedging across derivative product and promote greater overall liquidity;
2. Alignment of interest payment dates is desirable across the currency pairs;
3. The desire to reduce credit risk that would otherwise be generated if payment dates of principal were not align when notional principal is exchanged; and,
4. A potential to align interest payment dates with the repayment of principal – noting that in doing so consistency with existing RFR based derivative conventions would be undermined.

Convention Five: Interest payment dates for each leg of the swap should occur on a T+2 basis.
Convention Three: Exchange of notional principal payments should occur on the Settlement and Maturity dates of the swap

The rationale for these recommendations being that it retains:

1. Alignment of, and consistency in the calculation and payment of interest across both existing OIS based derivative conventions for cleared SOFR and NZIONA based swaps; and,
2. Alignment of, and consistency of notional principal exchange to existing 'IBOR' based USD to NZD Cross-Currency swap conventions.

It should be noted that in doing so there will be a two-day lag between the exchange of final notional principal and the final interest[5] payment.

Settlement Start Dates

ARRC recommend that transactions be based on a spot (2 business day) start.

Convention Six: Transactions be based on a spot (2 business day) settlement.

Reset (FX) of Notional Principals

ARRC note that resetting notional principals each quarter to current FX rates in order to keep mark-to market valuations is often used in current cross-currency inter-dealer transactions and that in order to reduce credit risk exposures are likely to be adopted in RFR/RFR inter-dealer transactions.

However, the ARRC also noted that other methods may be available (or evolve) to manage counterparty credit exposures and *recommended that transactions be based on a standard of reset of principal but also recognized that this choice depends on individual circumstances and that there are other potential options to mitigate credit exposures*

In terms of the mechanism to support the timing of notional resets three options are discussed:

1. Offsetting the RFR dates by 2 days (which appears to align with proposed ISDA fallbacks) and set the FX rate as currently done;
2. Making payment dates for RFR interest resettlement 2 days after the notional resetting date and set the FX rate on the notional resetting date; and,
3. Resetting the FX rate 2 business days prior to the next interest calculation period and making the notional payment on the end of the interest calculation period. The interest payment will be made 2 business days after the end of the interest rate calculation period.

Of these three options, the third is consistent with both NZFMA recommendation for *Convention Five* and existing 'IBOR' based principal resetting Cross-Currency swaps.

[5] It is possible to align the interest payments to the end of the interest period. However, this would require the use of some form of lookback or lockout in the calculation of interest. Whilst such mechanisms do exist for other products, these are not market standard, are currently not supported by existing ISDA definitions, and would require a departure from existing cleared conventions in the underlying OIS based product.

Convention Seven: Transactions should be priced, based on the principal of quarterly principal reset, recognising that this may not always be appropriate

Convention Eight: Resetting the FX rate should occur 2 business days prior to the next interest calculation period, with interim principal exchange occurring on the interest calculation period end date; and,

Convention Five: Interest payment dates for each leg of the swap should occur on a T+2 basis.

Discounting and Price Alignment Interest (PAI)

The ARRC noted that there is currently no explicitly-stated standard covering discounting in the Cross-Currency swap market. In many instances the use of USD discounting against the effective federal funds rate (EFFR) was prevalent in bilateral CSA agreements. However, with the move to switch from EFFR to SOFR based PAI discounting across the clearing houses it is possible that bilateral CSA may move to match this form of discounting over time.

The ARRC concluded that it was not *necessary to recommend any one convention for discounting*, but also concluded that, as a matter of practice, there should be a recommended convention for the quoting of prices in interdealer markets.

Convention Nine: Interdealer prices should be quoted on USD currency collateral discounted on an EFFR basis – noting that the form of PAI may evolve over time.

Summary of questions

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