



VIA ELECTRONIC EMAIL

26 March 2015

Mr Christopher Kirkpatrick
Commodity Futures Trading Commission
1155 21st Street NW
Three Lafayette Centre
Washington DC 20581

Dear Mr Kirkpatrick

Pursuant to CFTC regulation §39.5(b), LCH.Clearnet Limited ("LCH.Clearnet"), a derivatives clearing organization registered ("DCO") with the Commodity Futures Trading Commission (the "CFTC"), is submitting Zero Coupon Inflation-Indexed Swaps ("Inflation Swaps") for determination of whether mandatory clearing should apply.

From a systemic risk standpoint and for all concerned (market participants, regulators, market infrastructure providers and CCPs), we strongly recommend a material delay between a new product with additional risk factors (e.g. such as Inflation Swaps) becoming eligible for clearing and it being considered for a clearing obligation. We believe that a prudent approach is important to ensure sufficient evidence has been collected to demonstrate the appropriateness of a mandatory clearing obligation and that the market is sufficiently prepared for such an obligation to apply.

Inflation Swaps

LCH.Clearnet is launching Inflation Swaps as part of its SwapClear service, as an extension to its current product offering on March 30th, 2015. LCH.Clearnet is eligible to accept these swaps and would be able to maintain compliance in the event that these swaps were required to be cleared. SwapClear will launch Inflation Swaps referencing the most liquid indices, which correspond to the major underlying bond markets for inflation. The Inflation Swaps will be based on the following Indices, which cover approximately 95% of the developed market:

- United States, CPI-U;
- The Euro Area, HICPxT;

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- France, CPIxT; and
- United Kingdom, RPI.

The Inflation Swaps launched by SwapClear, being Zero Coupon, will have no exchange of funds before the maturity of the swap. However they will be marked to market and variation margin will be called/paid on an ongoing basis during the life of the trade. Product terms are market standard and follow the 2008 ISDA Derivatives Definitions¹. The following are further characteristics of the SwapClear Inflation Swaps at launch:

- The floating leg is determined from an inflation index;
- The fixing is based on publicly generated price indices (in France, US, UK and EU); and
- The maximum tenors are 50 years for UK and 30 years for other indices.

Inflation Swaps are similar to interest rate swaps in a number of ways:

- Both products trade through an OTC contract which can be customised to match customer needs;
- Payments on one side of the contract are defined by a fixed rate, while the other side is defined with reference to a published rate index;
- The market quotation for both trade types is the break even fixed rate for the trade;
- Both derivative markets are backed by deep and liquid government bond issuance;
- Valuation of both products is achieved by projecting the future floating index and then discounting both floating and fixed payments back to today;
- Cashflows on both products are settled net, and the notional is not paid or received in either case; and
- Trades in both cases can be long dated, up to 30 or 50 years depending on the underlying index.

LCH.Clearnet is submitting all of the Inflation Swaps it will accept for clearing for mandatory clearing determinations. This letter includes the information required by §39.5 for these Inflation Swaps.

Factors for determination

The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data

The market for inflation derivatives started around the turn of the 21st Century and has grown steadily through this period. One of the primary drivers of the market has been the active issuance by governments of index linked bonds. For example, as of 25th April 2014, the UK Debt Management Office (“DMO”) had a total of 23 index linked gilts in issue, with a market value of GBP 401.81bn (source: www.dmo.gov.uk/). The DMO Quarterly Review Oct-Dec 13 shows that the index linked gilt market value is approximately a 25% share of the total market value of all outstanding gilts. The duration of the index linked market is significantly longer than the conventional gilts in issue.

¹ <http://www.isda.org/publications/pdf/2008-inflation-defs.pdf>

LCH.Clearnet executed a market survey of member banks in April 2014 to determine the volume of trades in the derivatives market for the specific indices that they propose to clear. The survey looked at each of the four indices. The survey results showed over 9,000 trades were executed in the first quarter, with total notional of approximately GBP200bn. Daily market volume showed significant fluctuations over time, but the traded notional amount was below GBP1bn on only one day. Average notional during the period for all business days exceeds GBP 3bn equivalent. The derivatives market for inflation can therefore be seen to be both deep and liquid, and is backed by a liquid bond market.

Pricing data for inflation swaps is available from conventional sources, e.g. Bloomberg. However in order to ensure LCH.Clearnet prices are the best available, we have set up a process whereby quotes are sourced and aggregated from the major inflation derivatives trading banks, who are members of SwapClear, to create our marks.

The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded

LCH.Clearnet already has a well-developed rule framework and support infrastructure for clearing interest rate swaps. LCH.Clearnet intends to leverage this existing operational capability when extending its offering to cover Inflation Swaps.

In order to prepare for the launch of Inflation Swaps, LCH.Clearnet has performed testing to ensure that it is able to clear Inflation Swaps in manner which is consistent with the terms on which Inflation Swaps contracts are traded. Testing for Inflation Swaps has included involvement from those Clearing Members who will be actively clearing the product from its go-live.

Further to this, LCH.Clearnet has consulted with its Clearing Members on a number of rule changes which will be made in order to support the Inflation Swaps Clearing service. The LCH.Clearnet rule changes have been certified with the Commission and are available on the LCH.Clearnet website.

The effect on the mitigation of systemic risk, taking into account the size of the market for such contract and the resources of the DCO available to clear the contract

We strongly recommend a material delay between a new product with additional risk factors (e.g. such as Inflation Swaps) becoming eligible for clearing and it being considered for a clearing obligation. There are number of arguments in support of this approach, which apply to Inflation Swaps as well as in general:

1. Clearing eligibility may have been granted for an incomplete product set. In this event, a market participant with a balanced position in the complete product set will be forced to clear the now-clearing-obliged products while having to retain the clearing-ineligible remainder under bilateral arrangements. For example a participant may have exposure to inflation asset swaps hedged via zero coupon swaps. They would be obliged to clear one half of their position but unable to clear the other half. In such cases a clearing obligation would disrupt the prior balance and may increase system-wide risk;
2. As a result of current participant exemptions, the clearing obligation would apply to certain market participants but exempt others. A clearing obligation could therefore create asymmetries, with those parties who are exempt from clearing forcing their counterparties into a mismatched

cleared book relative to the portfolio-wide balance they maintain. If clearing is not mandated they retain the flexibility to clear only the trades which help them manage their counterparty risk;

3. For any newly cleared product, the CCP's default management protocols, processes and technology will have been modified to allow clearing of the new product. Although extensive testing will have taken place, this is no substitute for running the service with a live book of cleared trades for a period of time to fully ensure the robustness of the setup and to stimulate improvement wherever necessary; and
4. The CCP's risk management framework will have been calibrated to handle an expected volume of activity. Actual positions may be larger and more concentrated than research indicates. A mandatory clearing obligation would limit the amount of control the CCP has to restrict large sized risks from being cleared.

The effect on competition, including appropriate fees and charges applied to clearing

LCH.Clearnet expect to be the first clearing house to make Inflation Swaps available for clearing, although we are aware that other entities are actively working to provide this service. LCH.Clearnet's fees for inflation swap clearing will be somewhat higher than for interest rate swaps, reflecting the more specialised characteristics of the product. Fees have been certified with the Commission.

The existence of reasonable legal certainty in the event of the insolvency of the relevant DCO or one or more of its clearing members with regard to the treatment of customer and swap counterparty positions, funds and property

The level of legal certainty around the clearing of Inflation Swaps is in all material respects the same as that of the Interest Rate Swaps already cleared by LCH.Clearnet.

Insofar as legal certainty in the event of the insolvency of the DCO is concerned, LCH.Clearnet would be wound up under English law and has recently provided an updated opinion on the treatment of cleared swaps customer funds to the Commission.

Further Information (§39.5(b)(iii-viii))

Product terms for Inflation Swaps are market standard and follow the 2008 ISDA Derivatives Definitions².

Participant eligibility standards for Inflation Swaps are the same as for existing Interest Rate Swaps Clearing Members, with the addition of a requirement to provide Inflation Swaps market data.

In addition to existing data sources LCH.Clearnet will require nominated Clearing Members to provide Market Data once their clearing volumes exceed a certain size. LCH.Clearnet anticipates that at go-live 14 Clearing Members will be submitting market data for USD and 16 Clearing Members for the other indices. The LCH.Clearnet Rulebook has been amended to include provisions to allow LCH.Clearnet to sanction Clearing Members which do not comply with Market Data requirements.

² <http://www.isda.org/publications/pdf/2008-inflation-defs.pdf>

In order to launch this product LCH.Clearnet has considered the need to adapt its existing policies and practices to ensure that the DCO retains sufficient financial resources. The following areas have been updated, in line with the LCH.Clearnet Financial Resources Adequacy Policy:

- Initial Margin: The existing initial margin model has been adapted to cover a new type of risk with appropriate modelling of correlations. Historical simulations method to be used across full portfolio (interest rate swaps and Inflation Swaps) representing actual observed historic correlations over the last 10 years.
- Liquidity Risk Add-On: Inflation Swaps are a less liquid market than interest rate swaps, and there is potential for a member to bring in a large, concentrated inflation position. Therefore the liquidity margin framework has been adapted in a number of ways: ability to net between contracts has been limited; large positions are subject to super-linear extrapolation which increases the charge compared with an interest rate contract of equivalent size; there will be no zero band for Inflation Swaps (i.e. all positions will be charged an exit cost, even if small); and finally there is also a specific add-on for Inflation Swaps.

In order to further manage the risks associated with clearing Inflation Swaps, LCH.Clearnet has made the following changes:

- Default Fund sizing: Stress test scenarios used to size the SwapClear Default Fund have been augmented with new scenarios (historic and hypothetical) covering significant moves in inflation indices and breakdown in correlation between interest rate swaps and Inflation Swaps.
- Default management approach: LCH.Clearnet will use a single combined default fund covering interest rate swaps and Inflation Swaps. A single Default Management Group, which will include external members specialising in inflation markets, will be responsible for hedging the combined portfolio. An Inflation Swaps fire drill took place between 17th and 28th November 2014, to ensure that LCH.Clearnet has the correct processes and market knowledge to successfully manage the default of a significant Inflation Swaps market participant.

LCH.Clearnet has made a number of changes to its Rulebook to enable clearing of Inflation Swaps, in the following sections:

- General Regulations
- Procedures Section 2C (SwapClear)
- Default Rules
- Product Specific Contract Terms and Eligibility Criteria Manual
- FCM Regulations
- FCM Procedures
- FCM Product Specific Contract Terms and Eligibility Criteria Manual

These rule changes have been certified by the Commission pursuant to §40.6(a), following consultation with LCH.Clearnet Clearing Members.

LCH.Clearnet engages its Clearing Members in the design and testing of new products at an early stage, through regular meetings and working groups. Clearing Members have been formally consulted on the changes which LCH.Clearnet is required to make to its Rulebook. Clearing Member feedback has been incorporated into the final changes. Notice of this submission was given to SwapClear Clearing Members



on 25th March 2014, a copy of this notice is provided at **Appendix A**. Furthermore, this submission is publicly available at:

<http://www.lchclearnet.com/rules-regulations/regulatory-responses>

LCH.Clearnet intends to launch this new product with its clearing members and clients on 30th March 2015.

Should you have any questions please contact me at daniel.maguire@lchclearnet.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Daniel J Maguire".

Daniel J Maguire
Global Head of SwapClear and Listed Rates
LCH.Clearnet Limited

cc. Phyllis Dietz
Parisa Abadi

Appendix A
Notice of this submission provided to SwapClear Clearing Members

To: All SwapClear Clearing Members

Re: Inflation swaps DCO submission for determination of clearing requirement

Pursuant to CFTC regulation §39.5(b), LCH.Clearnet Limited (“LCH.Clearnet”), a derivatives clearing organization registered (“DCO”) with the Commodity Futures Trading Commission (the “CFTC”), is submitting Zero Coupon Inflation-Indexed Swaps (“Inflation Swaps”) for determination of whether mandatory clearing should apply. This is a standard part of the regulatory submission for any new product approval.

From a systemic risk standpoint and for all concerned (market participants, regulators, market infrastructure providers and CCPs), we strongly recommend a material delay between a new product with additional risk factors (e.g. such as Inflation Swaps) becoming eligible for clearing and it being considered for a clearing obligation. We believe that a prudent approach is important to ensure sufficient evidence has been collected to demonstrate the appropriateness of a mandatory clearing obligation and that the market is sufficiently prepared for such an obligation to apply.

As per CFTC regulation §39.5(b)(viii), LCH.Clearnet is required to provide notice to members of its submission. This note does not constitute a notification that the product is live for clearing. A separate notice announcing the live date and arrangements for the formal product launch will be published shortly.

The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data

The market for inflation derivatives started around the turn of the 21st Century and has grown steadily through this period. One of the primary drivers of the market has been the active issuance by governments of index linked bonds. For example, as of 25th April 2014, the UK Debt Management Office (“DMO”) had a total of 23 index linked gilts in issue, with a market value of GBP 401.81bn (source: www.dmo.gov.uk/). The DMO Quarterly Review Oct-Dec 13 shows that the index linked gilt market value is approximately a 25% share of the total market value of all outstanding gilts. The duration of the index linked market is significantly longer than the conventional gilts in issue.

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The availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the contract on terms that are consistent with the material terms and trading conventions on which the contract is then traded

LCH.Clearnet already has a well-developed rule framework and support infrastructure for clearing interest rate swaps. LCH.Clearnet intends to leverage this existing operational capability when extending its offering to cover Inflation Swaps.

In order to prepare for the launch of Inflation Swaps, LCH.Clearnet has performed testing to ensure that it is able to clear Inflation Swaps in manner which is consistent with the terms on which Inflation Swaps contracts are traded. Testing for Inflation Swaps has included involvement from those Clearing Members who will be actively clearing the product from its go-live.

Further to this, LCH.Clearnet has consulted with its Clearing Members on a number of rule changes which will be made in order to support the Inflation Swaps Clearing service. The LCH.Clearnet rule changes have been certified with the Commission and are available on the LCH.Clearnet website.

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1. Clearing eligibility may have been granted for an incomplete product set. In this event, a market participant with a balanced position in the complete product set will be forced to clear the now-clearing-obliged products while having to retain the clearing-ineligible remainder under bilateral arrangements. For example a participant may have exposure to inflation asset swaps hedged via zero coupon swaps. They would be obliged to clear one half of their position but unable to clear the other half. In such cases a clearing obligation would disrupt the prior balance and may increase system-wide risk;
2. As a result of current participant exemptions, the clearing obligation would apply to certain market participants but exempt others. A clearing obligation could therefore create asymmetries, with those parties who are exempt from clearing forcing their counterparties into a mismatched cleared book relative to the portfolio-wide balance they maintain. If clearing is not mandated they retain the flexibility to clear only the trades which help them manage their counterparty risk;
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The existence of reasonable legal certainty in the event of the insolvency of the relevant DCO or one or more of its clearing members with regard to the treatment of customer and swap counterparty positions, funds and property

LCH.Clearnet has obtained legal opinions which demonstrate the existence of such legal certainty in relation to the protection of customer and swap counterparty positions, funds, and property in the event of the insolvency of one or more clearing members.

LCH.Clearnet has obtained a legal opinion from US counsel regarding compliance with the protections afforded to FCM customers under New York law. Insofar as legal certainty in the event of the insolvency of the DCO is concerned, LCH.Clearnet would be wound up under English law and has provided opinions to the Commission on this point.

In order to launch this product LCH.Clearnet has considered the need to adapt its existing policies and practices to ensure that the DCO retains sufficient financial resources. The following areas have been updated, in line with the LCH.Clearnet Financial Resources Adequacy Policy:

- **Initial Margin**: The existing initial margin model has been adapted to cover a new type of risk with appropriate modelling of correlations. Historical simulations method to be used across full portfolio (interest rate swaps and Inflation Swaps) representing actual observed historic correlations over the last 10 years.
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that LCH.Clearnet has the correct processes and market knowledge to successfully manage the default of a significant Inflation Swaps market participant.

- Pricing: In addition to existing data sources LCH.Clearnet will require nominated Clearing Members to provide Market Data once their clearing volumes exceed a certain size. LCH.Clearnet anticipates that at go-live 14 Clearing Members will be submitting market data for USD and 16 Clearing Members for the other indices. The LCH.Clearnet Rulebook has been amended to include provisions to allow LCH.Clearnet to sanction Clearing Members which do not comply with Market Data requirements.

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LCH.Clearnet engages its Clearing Members in the design and testing of new products at an early stage, through regular meetings and working groups. Clearing Members have been formally consulted on the changes which LCH.Clearnet is required to make to its Rulebook. Clearing Member feedback has been incorporated into the final changes.

Further information will form part of the full §39.5 filing which will be publically available on the LCH.Clearnet website.

LCH.Clearnet looks forward to working with Clearing Members and the CFTC in the determination of clearing requirements. Please do not hesitate to contact me regarding any questions raised by this information.

Regards

David

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