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Part VI

## Commodity Futures Trading Commission

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17 CFR Part 50

Clearing Requirement Determination Under Section 2(h) of the CEA for  
Interest Rate Swaps; Proposed Rule

## COMMODITY FUTURES TRADING COMMISSION

### 17 CFR Part 50

RIN 3038-AE20

### Clearing Requirement Determination Under Section 2(h) of the CEA for Interest Rate Swaps

**AGENCY:** Commodity Futures Trading Commission.

**ACTION:** Notice of proposed rulemaking.

**SUMMARY:** The Commodity Futures Trading Commission (Commission or CFTC) is proposing to amend the Commission's rules to establish a new clearing requirement under the pertinent section of the Commodity Exchange Act (CEA). The amended regulation would require that interest rate swaps denominated in certain currencies or having certain termination dates, as described herein, be submitted for clearing by persons required to do so under the pertinent section of the CEA to a derivatives clearing organization (DCO) that is registered under the CEA (registered DCO) or a DCO that has been exempted from registration under the CEA (exempt DCO).

**DATES:** Comments must be received on or before July 18, 2016.

**ADDRESSES:** You may submit comments, identified by RIN number 3038-AE20, by any of the following methods:

- *CFTC Web site:* <http://comments.cftc.gov>. Follow the instructions for submitting comments through the Comments Online process on the Web site.

- *Mail:* Send to Christopher Kirkpatrick, Secretary of the Commission, Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.

- *Hand Delivery/Courier:* Same as Mail, above.

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.

Please submit your comments using only one method.

All comments must be submitted in English, or if not, accompanied by an English translation. Comments will be posted as received to <http://www.cftc.gov>. You should submit only information that you wish to make available publicly. If you wish the Commission to consider information that you believe is exempt from disclosure under the Freedom of Information Act (FOIA), a petition for confidential treatment of the exempt information may be submitted according

to the procedures established in § 145.9 of the Commission's regulations.<sup>1</sup>

The Commission reserves the right, but shall have no obligation, to review, pre-screen, filter, redact, refuse or remove any or all of your submission from <http://www.cftc.gov> that it may deem to be inappropriate for publication, such as obscene language. All submissions that have been redacted or removed that contain comments on the merits of the rulemaking will be retained in the public comment file and will be considered as required under the Administrative Procedure Act and other applicable laws, and may be accessible under the FOIA.

**FOR FURTHER INFORMATION CONTACT:**

Sarah E. Josephson, Deputy Director, Division of Clearing and Risk (DCR), at 202-418-5684 or [sjosephson@cftc.gov](mailto:sjosephson@cftc.gov); Peter A. Kals, Special Counsel, DCR, at 202-418-5466 or [pkals@cftc.gov](mailto:pkals@cftc.gov); Melissa A. D'Arcy, Special Counsel, DCR, at 202-418-5086 or [mdarcy@cftc.gov](mailto:mdarcy@cftc.gov); Meghan A. Tente, Special Counsel, DCR, at 202-418-5785 or [mtente@cftc.gov](mailto:mtente@cftc.gov); Michael A. Penick, Economist, Office of the Chief Economist (OCE), at 202-418-5279 or [mpenick@cftc.gov](mailto:mpenick@cftc.gov); or Lihong McPhail, Research Economist, OCE, at 202-418-5722 or [lmcpfail@cftc.gov](mailto:lmcpfail@cftc.gov), in each case at the Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street NW., Washington, DC 20581.

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<sup>1</sup> 17 CFR 145.9. Commission regulations referred to herein are found on the Commission's Web site at <http://www.cftc.gov/LawRegulation/CommodityExchangeAct/index.htm>.

## I. Background

### A. The Commission's First Clearing Requirement Determination

In December 2012, pursuant to section 2(h)(1)(A) of the CEA, which was added to the CEA by section 723 of Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), the Commission published its first clearing requirement determination (First Clearing Requirement Determination).<sup>2</sup> The First Clearing Requirement Determination was implemented between March 2013 and October 2013 based on the schedule described in regulation 50.25 and the preamble to the First Clearing Requirement Determination.<sup>3</sup>

The First Clearing Requirement Determination required the clearing of swaps within four classes of interest rate swaps and two classes of credit default swaps (CDS) that meet certain specifications. The Commission focused on these interest rate swaps and CDS in the First Clearing Requirement Determination because of the size of these markets relative to the derivatives market overall and because these swaps were already widely being cleared.<sup>4</sup>

The four classes of interest rate swaps required to be cleared by the First Clearing Requirement Determination were: (i) Fixed-to-floating swaps; (ii) basis swaps; (iii) overnight index swaps (OIS); and (iv) forward rate agreements (FRAs). As set forth in regulation 50.4(a), each class is limited to swaps having certain specifications pertaining to: (i) The currency in which the notional and payment amounts are specified; (ii) the floating rate index referenced in the swap; (iii) the stated termination date; (iv) optionality; (v) dual currencies; and (vi) conditional notional amounts.

With respect to the currency specification, the Commission limited the interest rate swaps required to be cleared to those denominated in U.S. dollars (USD), Euros (EUR), British pounds (GBP), and Japanese yen (JPY). In coming to this decision, the Commission noted that the interest rate swaps denominated in these currencies accounted for an outsized portion of the entire interest rate swap market in terms of both notional amounts outstanding and trading volumes compared to interest rate swaps denominated in other currencies.<sup>5</sup> The Commission also noted that it expected to publish a

<sup>2</sup> Clearing Requirement Determination Under Section 2(h) of the CEA, 77 FR 74284 (Dec. 13, 2012) (codified at 17 CFR 50.1 through 50.10).

<sup>3</sup> See 17 CFR 50.25; 77 FR at 74319-21.

<sup>4</sup> See 77 FR at 74287.

<sup>5</sup> *Id.* at 74308.

clearing requirement determination for interest rate swaps denominated in additional currencies in the future.<sup>6</sup> For the reasons discussed below, the clearing requirement determination proposed today would amend the First Clearing Requirement Determination to add a requirement to clear fixed-to-floating interest rate swaps denominated in nine additional currencies in which Chicago Mercantile Exchange, Inc. (CME), Eurex Clearing AG (Eurex), LCH.Clearnet Ltd. (LCH), and Singapore Exchange Derivatives Clearing Ltd. (SGX), each a Commission-registered DCO, clear interest rate swaps.<sup>7</sup> These additional currencies are Australian dollar (AUD), Canadian dollar (CAD), Hong Kong dollar (HKD), Mexican peso (MXN), Norwegian krone (NOK), Polish zloty (PLN), Singapore dollar (SGD), Swedish krona (SEK), and Swiss franc (CHF) (collectively, the nine additional currencies).<sup>8</sup> The clearing requirement determination proposed today also would require the clearing of certain basis swaps denominated in AUD, which are currently cleared by CME and LCH. Under the First Clearing Requirement Determination, certain basis swaps denominated in USD, EUR, GBP, and JPY must be cleared. The proposal also would require the clearing of certain AUD-, NOK-, PLN-, and SEK-denominated FRAs. Under the First Clearing Requirement Determination, certain FRAs denominated in USD, EUR, GBP, and JPY must be cleared.

With respect to the stated termination date specification, which also is referred to as the maturity of an interest rate

swap, the First Clearing Requirement Determination stated that, for OIS denominated in USD, EUR, and GBP, the range of termination dates subject to the clearing requirement was 7 days to 2 years. At the time, the Commission found that OIS with termination dates within this range warranted a clearing requirement determination because they had sufficient notional outstanding and trading liquidity necessary for a DCO to successfully risk manage and price them.<sup>9</sup>

When the First Clearing Requirement Determination was published, CME had not yet begun clearing OIS with termination dates greater than two years, and, although LCH had been offering such OIS for clearing, LCH data did not show any outstanding notional for these OIS.<sup>10</sup> Both LCH and CME now clear OIS out to 30 years, and Eurex offers to clear OIS out to 30 years as well. For the reasons discussed herein, the clearing requirement determination proposed today also would amend the First Clearing Requirement Determination to require the clearing of OIS with termination dates out to three years. Finally, the clearing requirement determination proposed today also would require the clearing of OIS denominated in AUD and CAD.

#### *B. Clearing Requirements in Other Jurisdictions*

Following is a summary of actions taken by other jurisdictions towards implementing clearing requirements for interest rate swaps denominated in the nine additional currencies. The Commission believes that it is important to harmonize its swap clearing requirement with clearing requirements promulgated in other jurisdictions. For example, if a non-U.S. jurisdiction issued a clearing requirement and a swap dealer (SD) located in the U.S. were not subject to that non-U.S. clearing requirement, then a swap market participant located in the non-U.S. jurisdiction might be able to avoid the non-U.S. clearing requirement by entering into a swap with the SD located in the U.S.

As the Commission reviewed the regulation 39.5(b) submissions from DCOs, it considered whether those products offered for clearing at DCOs were subject, or were likely to be subject, to a clearing requirement in another jurisdiction. For those products that were the subject of a clearing requirement rule or proposal outside of the U.S., the Commission reviewed the product specifications of the products

and the processes used by non-U.S. regulators. In addition, the Commission reviewed data produced in connection with any rule proposals or final rules implementing a clearing requirement in non-U.S. jurisdictions. Finally, the Commission considered comments submitted in response to clearing determination rule proposals in non-U.S. jurisdictions and any subsequent changes that regulators made to final rules implementing a clearing requirement. The Commission was informed by its review of non-U.S. jurisdictions' clearing requirement determinations and considered those determinations in preparing this proposed determination.

Accordingly, the scope of the swaps included in this proposal reflects the Commission's desire to harmonize with our counterparts abroad and is informed by the work of those regulators, as described below. In addition, the specifications of the swaps included in this proposed determination are intended to be consistent with those referenced in clearing requirements published by the Commission's counterparts abroad.

#### *i. Australia*

The Australian Securities and Investments Commission (ASIC) has published regulations that will require certain Australian and non-Australian entities to clear AUD-, USD-, GBP-, EUR-, and JPY-denominated fixed-to-floating interest rate swaps, basis swaps, and FRAs, as well as AUD-, USD-, GBP-, and EUR-denominated OIS.<sup>11</sup> The regulations' swap classes are co-extensive to those described in existing Commission regulation 50.4(a) except for the addition of AUD-denominated swaps. The Commission's clearing requirement proposal would make its AUD-denominated swaps in the fixed-to-floating interest rate swap, basis swap, FRA, and OIS classes consistent with the AUD-denominated swaps required to be cleared by ASIC. The Australian clearing requirement commenced for certain financial entities in April 2016.<sup>12</sup>

#### *ii. Canada*

In 2015, the Canadian Office of the Superintendent of Financial Institutions (OSFI) issued a "guideline" requiring certain Canadian financial institutions, as well as Canadian branches of non-

<sup>6</sup> *Id.* at 74309. In the First Clearing Requirement Determination, the Commission also stated that it intended to consider other swaps submitted by DCOs, such as agricultural, energy, and equity indices, as well as additional classes of CDS for a possible clearing requirement determination. See *id.* at 74287 and n.24. The Commission is committed to reviewing all swaps submitted by DCOs to determine whether such swaps should be required to be cleared, although it is possible that the Commission may determine that certain of these swaps are not appropriate for required clearing at this time. Finally, the Commission also may consider other classes of swaps for a clearing requirement determination, including additional types of CDS, as well as certain foreign exchange swaps, such as non-deliverable forwards.

<sup>7</sup> Two DCOs that the Commission has exempted from registration, ASX Clear (Futures) Pty Ltd. (Australia) and OTC Clearing Hong Kong Ltd., clear some of the swaps covered by this proposed determination (AUD- and HKD-denominated interest rate swaps, respectively). Pursuant to Commission orders, these two DCOs are permitted to clear for U.S. proprietary accounts but not for U.S. customers. In addition, these DCOs have not submitted filings under Commission regulation 39.5(b). Consequently, this proposal addresses only those registered DCOs that have submitted swaps for consideration under CFTC regulations.

<sup>8</sup> See Table 1 for information as to which registered DCOs clear fixed-to-floating interest rate swaps denominated in which currencies.

<sup>9</sup> *Id.* at 74310.

<sup>10</sup> *Id.*

<sup>11</sup> ASIC Derivative Transaction Rules (Clearing) 2015, available at: <https://www.comlaw.gov.au/Details/F2015L01960>.

<sup>12</sup> According to section 1.2.7 of the ASIC Derivative Transaction Rules (Clearing) 2015, the clearing requirement commenced on April 4, 2016, the first "Clearing Start Date."

Canadian financial institutions, to clear “standardized derivatives where practicable.”<sup>13</sup> Also, in 2015, Canada’s provincial securities regulators published a draft rule that would require certain derivatives to be cleared.<sup>14</sup> On February 24, 2016, the Canadian provincial securities regulators published a revised draft rule that proposes subjecting the following classes of interest rate swaps to a clearing mandate: CAD-, USD-, EUR-, and GBP-denominated fixed-to-floating interest rate swaps, basis swaps, and FRAs, as well as CAD-, USD-, EUR-, and GBP-denominated OIS.<sup>15</sup> The Canadian provincial securities regulators’ revised rule is expected to be finalized in 2016. The CAD-denominated swaps included in the Commission’s proposal are covered by the Canadian provincial securities regulators’ revised rule.

### iii. European Union

On August 6, 2015, the European Commission adopted an interest rate swap clearing requirement that the European Securities and Markets Authority (ESMA) developed pursuant to the European Market Infrastructure Regulation (EMIR).<sup>16</sup> The European interest rate swap class is coextensive with current Commission regulation 50.4(a), except that with respect to OIS, the European class covers OIS with a termination date range of up to three years instead of two. Like current regulation 50.4(a), the European class covers interest rate swaps denominated in USD, EUR, GBP, and JPY, not in any of the nine additional currencies.<sup>17</sup> Compliance with the European clearing requirement will be phased in between 2016 and 2018 depending on the type of counterparty.<sup>18</sup>

In November 2015, following the close of a comment period, ESMA

<sup>13</sup> Derivatives Sound Practices Guideline, available at: <http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/b7.aspx#toc3>.

<sup>14</sup> Draft National Instrument 94–101 respecting Mandatory Central Counterparty Clearing of Derivatives. Summary available at: [http://www.albertasecurities.com/Regulatory%20Instruments/5022685-v5-Proposed\\_NI\\_94-101\\_package.pdf](http://www.albertasecurities.com/Regulatory%20Instruments/5022685-v5-Proposed_NI_94-101_package.pdf).

<sup>15</sup> Draft Regulation 94–101 respecting Mandatory Central Counterparty Clearing of Derivatives (2nd Publication). Summary available at: <http://www.lautorite.qc.ca/files/pdf/reglementation/instruments-derives/reglements/94-101/2016-02-24/2016fev24-94-101-avis-cons-en.pdf>.

<sup>16</sup> European Commission press release announcing the European Clearing Obligation, available at: [http://europa.eu/rapid/press-release\\_IP-15-5459\\_en.htm](http://europa.eu/rapid/press-release_IP-15-5459_en.htm).

<sup>17</sup> Regulation (EU) No. 648/2012. See Revised Opinion, Draft RTS on the Clearing Obligation on Interest Rate Swaps, Annex I, pages 24–25 (Mar. 6, 2015), available at: [https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-511\\_revised\\_opinion\\_on\\_draft\\_rts\\_on\\_the\\_clearing\\_obligation.pdf](https://www.esma.europa.eu/sites/default/files/library/2015/11/2015-511_revised_opinion_on_draft_rts_on_the_clearing_obligation.pdf).

<sup>18</sup> *Id.* at 21–23 (Articles 2–5).

recommended to the European Commission that the European Union Clearing Obligation be expanded to cover NOK-, PLN-, and SEK-denominated fixed-to-floating interest rate swaps and FRAs.<sup>19</sup> The NOK-, PLN-, and SEK-denominated fixed-to-floating interest rate swaps and FRAs included in the Commission’s proposal are covered by ESMA’s recommendation to the European Commission.<sup>20</sup>

### iv. Hong Kong

On February 5, 2016, the Hong Kong Securities and Futures Commission and the Hong Kong Monetary Authority jointly published conclusions to a consultation paper proposing mandatory clearing for certain interest rate swaps.<sup>21</sup> The regulators submitted draft rules to the Legislative Council to implement a clearing requirement covering fixed-to-floating interest rate swaps and basis swaps denominated in USD, GBP, EUR, JPY, and HKD, as well as OIS denominated in USD, GBP, and EUR.<sup>22</sup> The legislative process has been completed, and the final rules are to take effect in September 2016.<sup>23</sup> The HKD-denominated interest rate swaps included in the Commission’s proposal are covered by the Hong Kong Securities and Futures Commission and the Hong Kong Monetary Authority’s final rules.

### v. Mexico

In 2015, Banco de Mexico, the Mexican central bank, published a clearing requirement mandating that certain Mexican financial institutions clear MXN-denominated fixed-to-floating interest rate swaps having a termination date range of approximately two months to 30 years and that reference the Mexican “Interbank Equilibrium Interest Rate” (TIEE).<sup>24</sup> The clearing requirement became effective for certain Mexican counterparties on April 1, 2016. The clearing requirement

<sup>19</sup> [https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1629-final\\_report\\_clearing\\_obligation\\_irs\\_other\\_currencies.pdf](https://www.esma.europa.eu/sites/default/files/library/2015/11/esma-2015-1629-final_report_clearing_obligation_irs_other_currencies.pdf).

<sup>20</sup> Poland and Sweden are members of the European Union, but Norway is not.

<sup>21</sup> Consultation Conclusions and Further Consultation on Introducing Mandatory Clearing and Expanding Mandatory Reporting, available at: <http://www.sfc.hk/edistributionWeb/gateway/EN/consultation/conclusion?refNo=15CP4>.

<sup>22</sup> *Id.* See also Securities and Futures (OTC Derivative Transactions—Clearing and Record Keeping Obligations and Designation of Central Counterparties) Rules, The Government of the Hong Kong Special Administrative Region Gazette, available at: <http://www.gld.gov.hk/egazette/pdf/20162005/es22016200528.pdf>.

<sup>23</sup> *Id.*

<sup>24</sup> Rules for Derivatives Transactions (Circular 4/2012), Banco de México, available at: <http://www.banxico.org.mx/distribuciones/circulares/%7BD7250B17-13A4-B0B7-F4E5-04AF29F37014%7D.pdf>.

will commence for certain non-Mexican counterparties executing swaps opposite Mexican counterparties during the second half of 2016.<sup>25</sup> The MXN-denominated interest rate swaps included in the Commission’s proposal are covered by the Banco de Mexico’s clearing requirement.

### vi. Singapore

In 2015, the Monetary Authority of Singapore (MAS) published proposed regulations that would require the clearing of SGD-denominated fixed-to-floating interest rate swaps referencing the Swap Offer Rate (SOR) and USD-denominated fixed-to-floating interest rate swaps referencing LIBOR.<sup>26</sup> The SGD-denominated interest rate swaps included in the Commission’s proposal are covered by the MAS’s proposed regulations.

### vii. Switzerland

In 2015, the Swiss parliament adopted legislation providing a framework for a swap clearing requirement. A clearing requirement is expected to be phased in during the second half of 2016. It is not yet known which products such a clearing requirement would cover.<sup>27</sup>

## C. Regulatory Background

Like the First Clearing Requirement Determination, the clearing requirement proposed herein would require the clearing of certain interest rate swaps pursuant to section 2(h) of the CEA. Under section 2(h)(1)(A) of the CEA, it is unlawful for any person to engage in a swap unless that person submits such swap for clearing to a DCO that is registered under the CEA or a DCO that is exempt from registration under the CEA if the swap is required to be cleared. A clearing requirement determination may be initiated by a swap submission from a registered DCO.<sup>28</sup> Section 2(h)(2)(B)(i) of the CEA

<sup>25</sup> See Financial Stability Board, Ninth Progress Report on Implementation, OTC Derivatives Market Reforms, Appendix D (Timetable for Implementation of Central Clearing Commitment) (July 24, 2015), available at: <http://www.financialstabilityboard.org/wp-content/uploads/OTC-Derivatives-Ninth-July-2015-Progress-Report.pdf> [hereinafter “Ninth Progress Report on Implementation”], at Appendix D.

<sup>26</sup> Summary published by MAS available at: <http://www.mas.gov.sg/News-and-Publications/Media-Releases/2015/MAS-Consults-on-Proposed-Regulations-for-Mandatory-Clearing-of-OTC-Derivatives.aspx>. See also Ninth Progress Report on Implementation, at Appendix D.

<sup>27</sup> See Ninth Progress Report on Implementation, at Appendix D.

<sup>28</sup> Section 2(h)(2) of the CEA provides the Commission with authority to issue a determination that a swap is required to be cleared pursuant to two separate review processes. CEA section 2(h)(2)(A) provides for a Commission-initiated review process whereby the Commission, on an

requires a DCO to submit to the Commission each swap, or any group, category, type, or class of swaps that it plans to accept for clearing and provide notice to its members of the submission. Regulation 39.5(b) implements the procedural elements of section 2(h)(2)(B)–(C) by establishing the procedures for the submission of swaps by a DCO to the Commission for a clearing requirement determination.<sup>29</sup>

#### *D. Commission Processes for Review and Surveillance of DCOs*

##### *i. Part 39 Regulations Set Forth Standards for Compliance*

Section 5b(c)(2) of the CEA sets forth 18 core principles with which DCOs must comply to be registered and to maintain registration. The core principles address numerous issues, including financial resources, participant and product eligibility, risk management, settlement procedures, default management, system safeguards, reporting, recordkeeping, public information, and legal risk.

Each of the DCOs that submitted the interest rate swaps that are the subject of this proposed determination are registered with the Commission. The DCOs' regulation 39.5(b) submissions discussed herein identify swaps that the DCOs are currently clearing. Consequently, the Commission has been reviewing and monitoring compliance by the DCOs with the core principles for clearing the submitted swaps.

The primary objective of the Commission's supervisory program is to ensure compliance with applicable provisions of the CEA and implementing regulations, and, in particular, the core principles applicable to DCOs. A primary concern of the program is to monitor and mitigate potential risks that can arise in derivatives clearing activities for the DCO, its members, and entities using the DCO's services. Accordingly, the Commission's supervisory program takes a risk-based approach.

ongoing basis, must review swaps (or a group, category, type or class of swaps) to make a determination as to whether a swap (or group, category, type or class of swaps) should be required to be cleared. The other process provided under section 2(h)(2)(B) of the CEA entails the Commission's review of swaps that are submitted by DCOs. Specifically, CEA section 2(h)(2)(B)(i) requires that each DCO submit to the Commission each swap (or group, category, type or class of swaps) that it plans to accept for clearing. The swaps subject to this proposed determination were submitted by DCOs pursuant to CEA section 2(h)(2)(B)(i) and Commission regulation 39.5.

<sup>29</sup> Section 2(h)(2)(B)–(C) of the CEA describes the process pursuant to which the Commission is required to review swap submissions from DCOs to determine whether the swaps should be subject to the clearing requirement.

In addition to the core principles set forth in section 5b(c)(2) of the CEA, section 5c(c) of the CEA governs the procedures for review and approval of new products, new rules, and rule amendments submitted to the Commission by DCOs. Part 39 of the Commission's regulations implements sections 5b and 5c(c) of the CEA by establishing specific requirements for compliance with the core principles, as well as procedures for registration, for implementing DCO rules, and for clearing new products. Part 40 of the Commission's regulations sets forth additional provisions applicable to a DCO's submission of rule amendments and new products to the Commission.

The Commission has means to enforce compliance, including the Commission's ability to sue the DCO in federal court for civil monetary penalties,<sup>30</sup> issue a cease and desist order,<sup>31</sup> or suspend or revoke the registration of the DCO.<sup>32</sup> In addition, any deficiencies or other compliance issues observed during ongoing monitoring or an examination are frequently communicated to the DCO and various measures are used by the Commission to ensure that the DCO appropriately addresses such issues, including escalating communications within the DCO management and requiring the DCO to demonstrate, in writing, timely correction of such issues.

##### *ii. Initial Registration Application Review and Periodic In-Depth Reviews*

Section 5b of the CEA requires a DCO to register with the Commission. In order to do so, an organization must submit an application demonstrating that it complies with the core principles. During the review period, the Commission generally conducts an on-site review of the prospective DCO's facilities, asks a series of questions, and reviews all documentation received. The Commission may ask the applicant to make changes to its rules to comply with the CEA and the Commission's regulations.

After registration, the Commission conducts examinations of DCOs to determine whether the DCO is in compliance with the CEA and Commission regulations. The examination consists of a planning phase where staff reviews information the Commission has on hand to determine whether the information raises specific issues and to develop an examination plan. The examination

team participates in a series of meetings with the DCO at its facility. Commission staff also communicates with relevant DCO staff, including senior management, and reviews documentation. Data produced by the DCO is independently tested. Finally, when relevant, walk-through testing is conducted for key DCO processes.

Commission staff also reviews DCOs that are systemically important (SIDCOs) at least once a year. CME has been determined to be a SIDCO.

##### *iii. Commission Daily Risk Surveillance*

Commission risk surveillance staff monitors the risks posed to and by DCOs, clearing members, and market participants, including market risk, liquidity risk, credit risk, and concentration risk. The analysis includes review of daily, large trader reporting data obtained from market participants, clearing members, and DCOs, which is available at the trader, clearing member, and DCO levels. Relevant margin and financial resources information also is included within the analysis.

Commission staff regularly conducts back testing to review margin coverage at the product level and follows up with the relevant DCO regarding any exceptional results. Independent stress testing of portfolios is conducted on a daily, weekly, and ad hoc basis. The independent stress tests may lead to individual trader reviews and/or futures commission merchant (FCM) risk reviews to gain a deeper understanding of a trading strategy, risk philosophy, risk controls and mitigants, and financial resources at the trader and/or FCM level. The traders and FCMs that have a higher risk profile are then reviewed during the Commission's on-site review of a DCO's risk management procedures.

Given the importance of DCOs within the financial system and the heightened scrutiny as more transactions are moved into central clearing, the goal of the Commission risk surveillance staff is: (1) To identify positions in cleared products subject to the Commission's jurisdiction that pose significant financial risk; and (2) to confirm that these risks are being appropriately managed. Commission risk surveillance staff undertakes these tasks at the trader level, the clearing member level, and the DCO level. That is, staff identifies both traders that pose risks to clearing members and clearing members that pose risks to the DCO. Staff then evaluates the financial resources and risk management practices of traders, clearing members, and DCOs in relation to those risks. Commission risk

<sup>30</sup> See section 6c of the CEA.

<sup>31</sup> See section 6b of the CEA.

<sup>32</sup> See section 5e of the CEA.

surveillance staff routinely monitors conditions in assigned markets throughout the day. Because of the work done in identifying accounts of interest, analysts are able to focus their efforts on those traders whose positions warrant heightened scrutiny under current conditions.

To gain insight into how markets operate during stressed market conditions, an essential technique in evaluating risk is the use of stress testing. Stress testing is the practice of determining the potential loss (or gain) to a position or portfolio based on a hypothetical price change or a hypothetical change in a price input such as option volatility. Commission risk surveillance staff conducts a wide array of stress tests. Some stress tests are based on the greatest price move over a specified period of time such as the last five years or the greatest historical price change. Another stress testing technique is the use of “event based” stress testing that replicates the price changes on a particular date in history, such as September 11, 2001, or Hurricane Katrina. Price changes can be measured as a dollar amount or a percentage change. This flexibility can be helpful when price levels have changed by a large amount over time. For example, the actual price changes in equity indices in October 1987 are not particularly large at today’s market levels but the percentage changes are meaningful.

The general standard in designing stress tests is to use “extreme but plausible” market moves. After identifying accounts at risk and estimating the size of the risk, the third step is to compare that risk to the assets available to cover it. Because stress testing, by definition, involves extreme moves, hypothetical results will exceed initial margin requirements on a product basis, *i.e.*, the price moves will be in the 1% tail. Many large traders, however, carry portfolios of positions with offsetting characteristics. In addition, many traders and clearing

members deposit excess initial margin in their accounts. Therefore, even under stressed conditions, in many instances the total initial margin available may exceed potential losses or the shortfall may be relatively small.

Each DCO maintains a financial resources package that protects the DCO against clearing member defaults. If a clearing member defaults on its obligations, the first layer of protection against a DCO default is the defaulting clearing member’s initial margin as well as the defaulting clearing member’s guaranty fund contribution. The second layer of protection against a DCO default, after the defaulting clearing member’s initial margin and guaranty fund contribution, is the DCO’s capital contribution. The third layer of protection against a DCO default is the DCO’s mutualized resources, which often include guaranty fund contributions of non-defaulting clearing members and assessments of non-defaulting clearing members. These layers of protection comprise the DCO’s financial resources package.

Commission risk surveillance staff compares the level of risk posed by clearing members to a DCO’s financial resources package on an ongoing basis. Pursuant to Commission regulation 39.11(a), a DCO must have sufficient financial resources to cover a default by the clearing member posing the largest risk to the DCO. Pursuant to Commission regulation 39.33(a), a systemically important DCO must have sufficient financial resources to cover defaults by the clearing members posing the two largest risks to the DCO. Commission risk surveillance staff periodically compares stress test results with DCOs to assess their financial capacity.

Commission risk surveillance staff frequently discusses the risks of particular accounts or positions with relevant DCOs. For example, as a follow-up to a trader review, Commission risk surveillance staff might compare its stress test results

with those of the DCO. As also noted above, in the case of FCMs, there have been instances where, as a result of Commission risk surveillance staff comments or inquiries, DCOs have taken action to revise their stress tests and/or financial resources package to align with Commission risk surveillance staff’s recommendations.

## II. Review of Swap Submissions

### A. General Description of Information Considered

CME and LCH provided the Commission with regulation 39.5(b) submissions relating to: Fixed-to-floating interest rate swaps denominated in the nine additional currencies; AUD-denominated basis swaps; and USD-, EUR-, and GBP-denominated OIS with termination dates of up to 30 years. CME and LCH provided § 39.5(b) submissions pertaining to the FRAs and OIS listed in Table 1, below. CME and SGX provided submissions relating to MXN- and SGD-denominated fixed-to-floating interest rate swaps, respectively. Eurex provided a submission relating to CHF-denominated fixed-to-floating interest rate swaps and OIS denominated in USD, EUR, and GBP with terms up to 30 years plus 10 business days.<sup>33</sup> Based on representations made by LCH to the Commission, LCH will begin offering MXN-denominated fixed-to-floating interest rate swaps during 2016. CME, Eurex, LCH, and SGX are eligible to clear interest rate swaps.<sup>34</sup>

Table 1 summarizes the relevant interest rate swaps submitted by CME, Eurex, LCH, and SGX.

<sup>33</sup> The § 39.5(b) submissions are available on the Commission’s Web site at: <http://www.cftc.gov/IndustryOversight/IndustryFilings/index.htm>. Submission materials that a submitting DCO marked for confidential treatment are not available for public review, pursuant to regulations 39.5(b)(5) and 145.9(d).

<sup>34</sup> A DCO is presumed eligible to accept for clearing swaps that are of the group, category, type, or class that the DCO already clears. See 17 CFR 39.5(a)(1).

TABLE 1—SUMMARY OF INTEREST RATE SWAP SUBMISSIONS UNDER REGULATION 39.5(b)

Currency	Floating rate index	Maximum stated termination date (years)	CME	Eurex	LCH	SGX
<b>Fixed-to-Floating Interest Rate Swaps</b>						
AUD .....	BBSW .....	30	Yes ...	No .....	Yes ...	No
CAD .....	CDOR .....	30	Yes ...	No .....	Yes ...	No
CHF .....	LIBOR .....	30	Yes ...	Yes ...	Yes ...	No
HKD .....	HIBOR .....	10	Yes ...	No .....	Yes ...	No
MXN .....	TIIE-BANXICO .....	21	Yes ...	No .....	No <sup>35</sup>	No
NOK .....	NIBOR .....	10	Yes ...	No .....	Yes ...	No
PLN .....	WIBOR .....	10	Yes ...	No .....	Yes ...	No
SGD .....	SOR-VWAP .....	10	Yes ...	No .....	Yes ...	Yes
SEK .....	STIBOR .....	30	Yes ...	No .....	Yes ...	No
<b>Basis Swap</b>						
AUD .....	BBSW .....	30	Yes ...	No .....	Yes ...	No
<b>Overnight Index Swaps</b>						
USD .....	FedFunds .....	30	Yes ...	Yes ...	Yes ...	No
EUR .....	EONIA .....	30	Yes ...	Yes ...	Yes ...	No
GBP .....	SONIA .....	30	Yes ...	Yes ...	Yes ...	No
AUD .....	AONIA-OIS .....	5.5	No .....	No .....	Yes ...	No
CAD .....	CORRA-OIS .....	2	No .....	No .....	Yes ...	No
<b>Forward Rate Agreements</b>						
AUD .....	BBSW .....	3	Yes ...	No .....	No .....	No
NOK .....	NIBOR .....	2	Yes ...	No .....	Yes ...	No
PLN .....	WIBOR .....	2	Yes ...	No .....	Yes ...	No
SEK .....	STIBOR .....	3	Yes ...	No .....	Yes ...	No

The Commission notes that these interest rate swaps are all single currency swaps without optionality, as defined by the applicable DCO.

The submissions from CME, Eurex, LCH, and SGX provided the information required by regulation 39.5(b)(3)(i)–(viii), which, along with other information, has assisted the Commission in making a quantitative and qualitative assessment that these swaps should be subject to a clearing requirement determination.<sup>36</sup> In making this proposed clearing requirement determination, the Commission considered the ability of CME, Eurex, LCH, and SGX to clear a given swap, as well as data supplied cumulatively from each DCO for these swaps. The Commission also reviewed the existing rule frameworks and risk management policies of each DCO.

Additionally, the Commission considered industry data, as available, as well as other publicly available data

sources, including information that has been made publicly available pursuant to part 43 of the Commission's regulations (part 43 data).<sup>37</sup> This notice of proposed rulemaking also reflects consultation with the staff of the Securities and Exchange Commission, U.S. prudential regulators, and international regulatory authorities. Finally, as regulation 39.5(b)(5) provides for a 30-day comment period for any clearing requirement determination, the Commission will consider public comment before making any final clearing requirement determination.

#### B. Proposed Determination Analysis

##### i. Background Information on Interest Rate Swaps

Interest rate swaps generally are agreements wherein counterparties agree to exchange payments based on a series of cash flows over a specified period of time, typically calculated

using two different rates, multiplied by a notional amount. As of June 2015, according to an estimate by the Bank for International Settlements (BIS), there was approximately \$435 trillion in outstanding notional of interest rate swaps, which represents approximately 79% of the total outstanding notional of all derivatives.<sup>38</sup>

Section 2(h)(2)(A)(i) of the CEA provides that the Commission shall review each swap, or any group, category, type, or class of swaps to make a determination as to whether the swap or group, category, type, or class of swaps should be required to be cleared. The proposed clearing requirement determination would amend the four classes of interest rate swaps that the

<sup>35</sup> LCH plans to offer clearing of MXN-denominated fixed-to-floating interest rate swaps in 2016.

<sup>36</sup> In their submissions, CME and LCH stated that they had provided notice of the submissions to members as required by regulation 39.5(b)(3)(viii). SGX stated that its § 39.5(b) submission was published on its Web site. Eurex stated that it will forward its § 39.5(b) submission to its members so that they may comment.

<sup>37</sup> The Commission notes that it also has access to data pursuant to part 45 of the Commission's regulations (part 45 data) that is used in the cost benefit considerations in section V below. For the purposes of this proposal, the Commission decided to use the part 43 data in the determination analysis in section II.B below to enable commenters to review the same data that the Commission reviewed in making the determination. The Commission may in the future rely on aggregated, anonymized part 45 data in making such determinations.

<sup>38</sup> Semi-Annual OTC Derivatives Statistics at End-June 2015, published December 2015 available at: <https://www.bis.org/statistics/derstats.htm>. The BIS data provides the broadest market-wide estimates of interest rate swap activity available to the Commission. The Commission receives swaps market information pursuant to Parts 43 and 45 of the Commission's regulations. See also Swap Data Recordkeeping and Reporting Requirements, 77 FR 2136 (Jan. 13, 2012); Real-Time Public Reporting of Swap Transaction Data, 77 FR 1182 (Jan. 9, 2012). However, this data only includes swaps subject to the Commission's jurisdiction, i.e., those swaps subject to the Dodd-Frank Act. The BIS data represents the broader swaps market, some of which is not reportable to the Commission under the Dodd-Frank Act.

Commission defined in the First Clearing Requirement Determination:

1. Fixed-to-floating swaps: Swaps in which the payment or payments owed for one leg of the swap is calculated using a fixed rate and the payment or payments owed for the other leg are calculated using a floating rate.

2. Basis swaps: Swaps for which the payments for both legs are calculated using floating rates.

3. Forward rate agreements: Swaps in which payments are exchanged on a pre-determined date for a single specified period and one leg of the swap is calculated using a fixed rate and the other leg is calculated using a floating rate that is set on a pre-determined date.

4. Overnight Index Swaps: Swaps for which one leg of the swap is calculated using a fixed rate and the other leg is calculated using a floating rate based on a daily overnight rate.

Interest rate swaps within the classes described above are required to be cleared according to the First Clearing Requirement Determination if they meet certain specifications: (i) Currency in which notional and payment amounts of a swap are specified; (ii) floating rate index referenced in the swap; and (iii) stated termination date of the swap. The Commission also included the following three “negative” specifications:<sup>39</sup> (i) no optionality; (ii) no dual currencies; and (iii) no conditional notional amounts.<sup>40</sup> The clearing requirement determination proposed today analyzes the additional interest rate swaps submitted by CME, Eurex, LCH, and SGX according to these classifications and specifications.

#### ii. Consistency With Core Principles for Derivatives Clearing Organizations

Section 2(h)(2)(D)(i) of the CEA requires the Commission to determine whether a clearing requirement determination would be consistent with the core principles for registered DCOs set forth in section 5b(c)(2) of the CEA

<sup>39</sup>The negative specifications are product specifications that are explicitly excluded from the clearing requirement. All specifications are listed in regulation 50.4.

<sup>40</sup>The First Clearing Requirement Determination described the term “conditional notional amount” as “notional amounts that can change over the term of a swap based on a condition established by the parties upon execution such that the notional amount of the swap is not a known number or schedule of numbers, but may change based on the occurrence of some future event. This term does not include what are commonly referred to as ‘amortizing’ or ‘roller coaster’ notional amounts for which the notional amount changes over the term of the swap based on a schedule of notional amounts known at the time the swap is executed. Furthermore, it would not include a swap containing early termination events or other terms that could result in an early termination of the swap if a DCO clears the swap with those terms.” See 77 FR at 74302 n. 108.

and implemented in part 39 of the Commission’s regulations.<sup>41</sup> CME, Eurex, LCH, and SGX, each a registered DCO, already clear the swaps identified in the regulation 39.5(b) submissions described above.<sup>42</sup> Accordingly, CME, Eurex, LCH, and SGX already are required to comply with the DCO core principles with respect to the interest rate swaps being considered by the Commission as part of this clearing requirement determination. Moreover, each of these DCOs is subject to the Commission’s review and surveillance procedures with respect to these swaps.

For the purposes of reviewing whether the regulation 39.5(b) submissions are consistent with the DCO core principles, the Commission has relied on both the information received in the regulation 39.5(b) submissions and, as discussed above, its ongoing review and risk surveillance programs.

The Commission believes that CME, Eurex, LCH, and SGX would be capable of maintaining compliance with the DCO core principles following a clearing requirement determination for the interest rate swaps that they currently clear. The Commission has not found any evidence to conclude that subjecting any of the interest rate swaps identified herein to a clearing requirement would alter compliance by CME, Eurex, LCH, or SGX with the DCO core principles. Accordingly, the Commission believes that each of the regulation 39.5(b) submissions discussed herein is consistent with section 5b(c)(2) of the CEA.

#### Request for Comment

The Commission requests comment as to whether the proposed clearing requirement determination would adversely affect CME’s, Eurex’s, LCH’s, or SGX’s ability to comply with the DCO core principles.

#### iii. Consideration of the Five Statutory Factors for Clearing Requirement Determinations

Section 2(h)(2)(D)(ii)(I)–(V) of the CEA identifies five factors that the Commission must “take into account”

<sup>41</sup>The core principles address numerous issues, including financial resources, participant and product eligibility, risk management, settlement procedures, default management, system safeguards, reporting, recordkeeping, public information, and legal risk. See CEA section 5b(c)(2)(A)–(R); 17 CFR part 39, subparts B and C.

<sup>42</sup>Currently, CME is the only registered DCO clearing MXN-denominated fixed-to-floating interest rate swaps. LCH intends to file a § 39.5(b) submission regarding this swap in 2016. LCH does not anticipate that it will need to make a change to its risk management framework in order to commence clearing MXN-denominated fixed-to-floating interest rate swaps.

in making a clearing requirement determination.<sup>43</sup> In regulation 39.5(b), the Commission developed a process for reviewing DCO swap submissions to determine whether such swaps should be subject to a clearing requirement determination. The following is the Commission’s consideration of the five factors as they relate to (a) fixed-to-floating interest rate swaps denominated in the nine additional currencies, (b) AUD-denominated basis swaps, (c) AUD-, NOK-, PLN-, and SEK-denominated FRAs, (d) USD-, EUR-, and GBP-denominated OIS with termination dates of up to three years, and (e) AUD- and CAD-denominated OIS, as submitted by CME, Eurex, LCH, and SGX pursuant to regulation 39.5(b).

One particular topic that the Commission considered as it reviewed the five statutory factors for this clearing requirement is the effect a new clearing mandate would have on a DCO’s ability to withstand stressed market conditions. The post-financial crisis reforms that have increased the use of central clearing also have increased the importance of ensuring that central counterparties are resilient, particularly in times of stress. The Commission has been working with other domestic and international regulators to make sure that adequate measures are taken to address the potential financial stability risks posed by central counterparties. The Commission is focused on the financial stability of DCOs and is committed to monitoring all potential risks they face, including those related to increased clearing due to a new clearing requirement. Accordingly, how DCOs manage risk during times of market stress, as well as whether DCOs could manage the incremental risk in stressed market conditions that may result from the Commission mandating these products for clearing, are critical factors that the Commission considered in issuing this proposal.

<sup>43</sup>The factors are:

- (1) The existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data;
- (2) 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;
- (3) 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;
- (4) The effect on competition, including appropriate fees and charges applied to clearing; and
- (5) 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.



a. *Factor (I)—Outstanding notional exposures, trading liquidity, and adequate pricing data.*

The first of the five factors requires the Commission to consider “the existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data” related to “a submission made [by a DCO].”<sup>44</sup> As explained in the proposal for the First Clearing Determination, there is no single source of data for notional exposures and trading liquidity for individual products within the global interest rate swap market.<sup>45</sup> The Commission has considered multiple sources of data<sup>46</sup> on the interest rate swap market that provide the information the Commission needs to evaluate the first factor, including: (1) Publicly available real time data disseminated by DTCC Data Repository (DDR), a provisionally-registered swap data repository (SDR),<sup>47</sup> pursuant to part 43 data; (2) data from CME, Eurex, LCH, and SGX in their capacities as DCOs; (3) data from the BIS; (4) data from the International Swaps and Derivatives Association (ISDA); and (5) data from

the Futures Industry Association (FIA).<sup>48</sup>

The Commission invites market participants to submit data from any available data sources that it has not considered.

1. *Outstanding notional exposures and trading liquidity: Fixed-to-floating interest rate swaps denominated in the nine additional currencies.*

In assessing the extent of outstanding notional exposures and trading liquidity for a particular swap, the Commission reviews various data series to ascertain whether there is an active market for the swap, including whether the swap is traded on a regular basis as reflected by trade count, and whether there is a measurable amount of notional exposures, such that a DCO can adequately risk manage the swap. In particular, the Commission reviewed the aggregate notional exposure and the trade count data from a number of sources for each swap subject to this proposal. While there is no defined standard for an active market, the Commission believes the data indicates that there are sufficient outstanding notional exposures and trading liquidity for fixed-to-floating interest rate swaps denominated in the nine additional currencies to support a clearing requirement determination. The part 43 data presented in Table 2 generally demonstrates that there is significant activity in new fixed-to-floating interest rate swap trades denominated in each of the nine additional currencies. Table 2 presents aggregate notional values and trade counts of fixed-to-floating interest rate swaps denominated in these currencies that were executed during the three-month period from April 1 to June 30, 2015.<sup>49</sup>

<sup>48</sup> In the First Clearing Requirement Determination, the Commission also considered (i) market data published weekly by TriOptima that covered swap trade information submitted voluntarily by 14 large derivatives dealers and (ii) trade-by-trade data provided voluntarily by the 14 dealers to the OTC Derivatives Supervisors Group (ODSG). See 77 FR at 74307. The Commission is not using these sources for the determination proposed today because TriOptima no longer collects its data, and the ODSG data was a one-time exercise conducted between June and August 2010.

<sup>49</sup> The data on notional amounts the Commission receives for interest rate swaps pursuant to part 43 is subject to caps, which vary based on currency, reference rate, swap class (e.g., FRA vs. OIS), and maturity of the underlying swap. As a result, the data in Table 2 will underestimate the amount of notional outstanding for the reported trades, as around 25% of the trades contained capped notional amounts. See 17 CFR 43.4(h). According to the adopting release accompanying part 43, the

The Commission notes the market for any swap is global. Even if the bulk of the activity in a particular swap occurs between counterparties located in a single jurisdiction, Table 2 demonstrates that there is significant participation by U.S. persons in each of the swaps covered by this proposed determination.<sup>50</sup>

TABLE 2—PART 43 DATA FIXED-TO-FLOATING INTEREST RATE SWAPS AGGREGATE NOTIONAL AMOUNTS AND TRADE COUNTS REPORTED SECOND QUARTER 2015<sup>51</sup>

Currency	Notional reported (USD)	Trade count
MXN .....	403,621,757,132	15,492
CAD .....	318,497,173,863	4,125
AUD .....	322,042,446,624	4,898
SEK .....	82,092,397,444	1,779
PLN .....	47,267,162,195	1,463
NOK .....	23,974,272,144	659
SGD .....	45,618,398,397	995
CHF .....	48,986,953,725	899
HKD .....	21,704,787,338	469

Commission caps notional amounts to ensure the anonymity of the parties to a large swap and maintain the confidentiality of business transactions and market positions. See Real-Time Public Reporting of Swap Transaction Data, 77 FR 1182, 1213 (Jan. 9, 2012). The rules were amended in May 2013 as they relate to caps. See Procedures to Establish Appropriate Minimum Block Sizes for Large Notional Off-Facility Swaps and Block Trades, 78 FR 32866, May 13, 2013.

<sup>50</sup> Under the Commission's general policy, neither part 43 reporting nor the clearing requirement apply to a swap where neither counterparty is a U.S. person (although these requirements generally would apply, with the possibility of substituted compliance, to certain swaps involving foreign branches of U.S. SDs or major swap participants (MSPs), or non-U.S. persons that are guaranteed by or affiliate conduits of U.S. persons). See Interpretive Guidance and Policy Statement Regarding Compliance With Certain Swap Regulations, 78 FR 45292, 45369–70 (July 26, 2013).

<sup>51</sup> This table reflects data that was publically disseminated by DDR and reported to it by the reporting counterparty, a SEF, or designated contract market (DCM) pursuant to part 43. As such, the Commission did not independently verify the accuracy of the swap data. The transactions disseminated to the public were rounded pursuant to regulation 43.4(g). As a result, this table may underestimate the amount of notional outstanding for the reported trades. This table does not include cancelled and corrected swaps that counterparties reported under part 43. The Commission converted the notional amounts to USD according to the exchange rates of June 30, 2015. Two other SDRs provisionally registered with the Commission, CME SDR and Bloomberg SDR, also collect information pursuant to part 43. During the second quarter of 2015, neither of those SDRs collected information pertaining to the interest rate swaps that are the subject of this proposed determination.

<sup>44</sup> See CEA section 2(h)(2)(D)(ii).

<sup>45</sup> See 77 FR 47170, 47193 and n. 100, Aug. 7, 2012 (citing Bank of England, “Thoughts on Determining Central Clearing Eligibility of OTC Derivatives,” Financial Stability Paper No. 14, March 2012, at 11, available at: [http://www.bankofengland.co.uk/financialstability/Documents/fpc/fspapers/fs\\_paper14.pdf](http://www.bankofengland.co.uk/financialstability/Documents/fpc/fspapers/fs_paper14.pdf).) As discussed above, the Commission receives data regarding swaps subject to its jurisdiction pursuant to parts 43 and 45 of the Commission's regulations. The Commission also receives regular reporting from registered DCOs, as well as its registered entities.

<sup>46</sup> The Commission reviews part 43 data, as well as data from CME, Eurex, LCH, and SGX, on an ongoing basis. Although the part 43 data that is included below in section II.B.iii.a is dated as of the Second Quarter 2015, Commission staff has not observed significant changes in the level of trading activity that would cause the Commission to change its finding that there is regular trading activity in these markets, as well as a measurable amount of data, leading the Commission to believe that there are significant outstanding notional exposures and trading liquidity in the products that are the subject of this proposal. In addition, although the data from DCOs presented below in section II.B.iii.a is dated as of the Second Quarter 2015, Commission staff has not observed significant changes in the notional amounts outstanding or the aggregate notional values of swaps being cleared that would cause the Commission to change its finding that there are significant outstanding notional exposures and trading liquidity in the interest rate swaps that are the subject of this proposal.

<sup>47</sup> CME SDR and Bloomberg SDR, each a registered SDR, collect data regarding interest rate swaps but have not collected data relevant to this proposed determination. ICE Trade Vault, another registered SDR, does not accept interest rate swaps.

Table 3.1 demonstrates the notional amounts outstanding of fixed-to-floating interest rate swaps, denominated in each of the nine additional currencies except for MXN, cleared at LCH as of July 17, 2015.<sup>52</sup>

TABLE 3.1—LCH DATA FIXED-TO-FLOATING INTEREST RATE SWAPS NOTIONAL AMOUNTS OUTSTANDING AS OF JULY 17, 2015<sup>53</sup>

Currency	Outstanding notional <sup>54</sup> (USD)
CAD .....	\$3,479,830,407,148
AUD .....	3,311,898,621,627
CHF .....	1,110,123,528,868
SEK .....	942,508,451,280
SGD .....	735,450,982,935
PLN .....	500,992,688,256
NOK .....	402,746,575,455
HKD .....	385,067,416,327

Table 3.2 describes the aggregate notional values and trade counts of fixed-to-floating interest rate swaps denominated in these currencies that were cleared at LCH during the three-month period from April 1 to June 30, 2015.

TABLE 3.2—LCH DATA FIXED-TO-FLOATING INTEREST RATE SWAPS AGGREGATE NOTIONAL AMOUNTS CLEARED AND TRADE COUNTS<sup>55</sup> SECOND QUARTER 2015

Currency	Aggregate notional <sup>56</sup> (USD)	Trade count
AUD .....	\$747,580,867,222	11,675
CAD .....	591,935,914,049	8,097
SEK .....	192,434,187,521	5,827
SGD .....	188,573,379,738	4,872
CHF .....	175,203,370,522	3,659
PLN .....	99,184,390,887	4,249
NOK .....	72,569,065,080	2,855
HKD .....	65,655,762,520	1,868

Table 4.1 demonstrates the notional amounts outstanding of fixed-to-floating interest rate swaps, denominated in each of the nine additional currencies, cleared at CME as of July 17, 2015.

TABLE 4.1—CME DATA FIXED-TO-FLOATING INTEREST RATE SWAPS—OPEN INTEREST<sup>57</sup> AS OF JULY 17, 2015<sup>58</sup>—Continued

TABLE 4.1—CME DATA FIXED-TO-FLOATING INTEREST RATE SWAPS—OPEN INTEREST<sup>57</sup> AS OF JULY 17, 2015<sup>58</sup>

Currency	Open interest (USD)
CAD .....	\$295,213,937,641
MXN .....	283,989,842,748

Currency	Open interest (USD)
AUD .....	192,208,979,188
SEK .....	30,834,434,233
NOK .....	25,396,100,018
CHF .....	18,322,872,584
PLN .....	4,157,627,521
HKD .....	1,937,495,645
SGD .....	1,014,201,616

Table 4.2 describes the aggregate notional values of fixed-to-floating interest rate swaps denominated in these currencies that were cleared at CME during the three-month period from April 1 to June 30, 2015.

<sup>52</sup> As mentioned above, LCH intends to commence clearing fixed-to-floating interest rate swaps denominated in MXN in 2016.

<sup>53</sup> Data includes zero coupon swaps, variable notional swaps, and inflation swaps. Data excludes basis swaps, FRAs, and OIS. LCH converted values to USD. All data from LCH cited in this notice of proposed rulemaking is “single-sided” such that notional amounts correspond to the notional amounts of swaps submitted for clearing. LCH publishes outstanding notional amounts of the swaps it has cleared. See LCH’s Web site, available at: <http://www.swapclear.com/what/clearing-volumes.html>.

<sup>54</sup> As mentioned above, LCH intends to commence clearing fixed-to-floating interest rate swaps denominated in MXN in 2016.

<sup>55</sup> Like the outstanding notional data, this data includes zero coupon swaps, variable notional swaps, and inflation swaps.

<sup>56</sup> The aggregate notional amounts cleared at LCH will appear to be greater than that reflected in the part 43 data because the part 43 data only captures swap data subject to the Dodd-Frank Act, while LCH, a UK entity, clears swaps for participants who may not be subject to the Commission’s jurisdiction. The fact that LCH’s notional amounts are higher supports this proposed clearing requirement determination because it suggests that

there may be extensive liquidity in these swaps outside the U.S., of which DCOs could take advantage in order successfully to risk manage and price these swaps.

<sup>57</sup> CME uses the term “open interest” to refer to notional outstanding. CME converted the values to USD. All data from CME cited in this notice of proposed rulemaking is “single-sided” such that notional amounts correspond to the notional amounts of swaps submitted for clearing.

<sup>58</sup> Data excludes basis swaps, FRAs, and OIS. CME publishes open interest amounts of the swaps it has cleared. See CME’s Web site, available at: <http://www.cmegroup.com/trading/interest-rates/cleared-otc/#data>.

TABLE 4.2—CME DATA FIXED-TO-FLOATING INTEREST RATE SWAPS AGGREGATE NOTIONAL AMOUNTS CLEARED AND TRADE COUNTS SECOND QUARTER 2015

Currency	Aggregate notional (USD)	Trade count
MXN .....	\$193,941,151,671	7,749
AUD .....	51,591,005,387	1,194
CAD .....	91,523,261,511	2,995
SEK .....	9,712,957,726	998
NOK .....	5,298,232,932	422
CHF .....	2,665,840,791	173
PLN .....	1,097,490,552	577
SGD .....	355,136,534	32
HKD .....	211,815,688	16

As of July 17, 2015, the notional amount of SGD-denominated fixed-to-floating interest rate swaps cleared at SGX was \$58.5 billion.<sup>59</sup>

As another data source, the Commission looked to BIS data. BIS' most recent triennial central bank survey for interest rate swaps describes the daily average notional values of

interest rate swaps, including fixed-to-floating interest rate swaps, on a worldwide basis, denominated in each of the nine additional currencies.

TABLE 5—EXCERPT FROM BIS TRIENNIAL CENTRAL BANK SURVEY 2013<sup>60</sup> OVER-THE-COUNTER SINGLE CURRENCY INTEREST RATE DERIVATIVES TURNOVER

Currency	Daily average notional of swaps (including fixed-to-floating), worldwide (USD) <sup>61</sup>
AUD .....	\$62,854,000,000
CAD .....	26,794,000,000
SEK .....	14,618,000,000
MXN .....	9,285,000,000
CHF .....	5,335,000,000
SGD .....	3,349,000,000
NOK .....	2,560,000,000
PLN .....	2,138,000,000
HKD .....	1,992,000,000

More recently, BIS has published statistics showing significant outstanding notional amounts for CAD-, CHF-, and SEK-denominated interest rate swaps: Approximately \$10.3 trillion CAD-denominated,

approximately \$3.2 trillion CHF-denominated, and approximately \$2.4 trillion SEK-denominated.<sup>62</sup>

On a daily basis, using data collected from DDR, ISDA's "SwapsInfo" report publishes the notional value and trade

counts of fixed-to-floating interest rate swaps denominated in four of the nine additional currencies.<sup>63</sup> For example, Table 6 shows the aggregate notional values and trade counts of such swaps entered into on September 15, 2015.

TABLE 6—EXCERPT FROM ISDA SWAPSINFO INTEREST RATE DERIVATIVES—PRICE/TRANSACTION DATA FIXED-TO-FLOATING INTEREST RATE SWAPS

Currency	Approximate aggregate notional amount executed on September 15, 2015 (USD) <sup>64</sup>	Aggregate trade count executed on September 15, 2015
AUD .....	\$2,143,376,093	51
CAD .....	1,515,366,916	30

<sup>59</sup>SGX converted this value from SGD to USD. This figure is "single-sided" such that the notional amount corresponds to the notional amounts of swaps submitted for clearing. SGX publishes outstanding notional amounts on its Web site, available at: <http://www.sgx.com>.

<sup>60</sup>BIS Triennial Central Bank Survey, Interest Rate Derivatives Market Turnover in 2013, Tables 1 and 2.1–2.6 (December 2013), available at: <http://www.bis.org/publ/rpfx13irt.pdf>.

<sup>61</sup>Data as of April 2013. BIS converted the figures to USD.

<sup>62</sup>Interest rate derivatives by instrument, counterparty, and currency. Notional amounts outstanding, expressed in USD, at end June 2015, available at: <http://stats.bis.org/statx/srs/table/d7?p=20151&c=>. This report does not provide data specific to interest rate swaps denominated in the rest of the nine additional currencies.

<sup>63</sup>SwapsInfo provides data from DDR and Bloomberg SDR "required to be disclosed under U.S. regulatory guidelines." SwapsInfo does not provide information specific to interest rate swaps denominated in the rest of the nine additional currencies. The SwapsInfo referenced in Table 6 only includes information from DDR. See SwapsInfo Web site, available at: <http://www.swapsinfo.org/charts/derivatives/price-transaction>.

TABLE 6—EXCERPT FROM ISDA SWAPINFO INTEREST RATE DERIVATIVES—PRICE/TRANSACTION DATA FIXED-TO-FLOATING INTEREST RATE SWAPS—Continued

Currency	Approximate aggregate notional amount executed on September 15, 2015 (USD) <sup>64</sup>	Aggregate trade count executed on September 15, 2015
MXN .....	283,339,847	142
PLN .....	141,249,743	19

The Commission also reviewed data published by the FIA, in its “SEF Tracker” report,<sup>65</sup> consisting of weekly aggregate notional values of interest rate swaps, including FRAs, denominated in various currencies, including five of the

nine additional currencies, which have been transacted on 12 swap execution facilities (SEFs) that are now registered with the Commission.<sup>66</sup> Table 7 shows the aggregate notional values of interest rate swaps denominated in AUD, CAD,

MXN, PLN, and SEK executed on SEFs during the week of May 25, 2015, as well as such swaps denominated in CHF, HKD, and NOK.<sup>67</sup>

TABLE 7—FIA DATA WEEKLY NOTIONAL VOLUME OF INTEREST RATE SWAPS (INCLUDING FRAS) BY CURRENCY<sup>68</sup>

Currency	Aggregate weekly notional volume executed on SEFs Week of May 25, 2015 (USD) <sup>69</sup>
AUD .....	\$36,194,670,000
MXN .....	19,526,810,000
CAD .....	12,527,450,000
CHF .....	6,686,971,251
SEK .....	5,958,000,000
PLN .....	1,420,000,000
NOK .....	1,403,918,860
HKD .....	51,589,605

In summary, the data indicates varying levels of activity, measured by outstanding notional amounts and trade counts, in fixed-to-floating interest rate swaps denominated in the nine additional currencies. The Commission also acknowledges that the data comes from various, limited periods of time that do not explicitly include periods of market stress. However, the Commission believes that the data demonstrates sufficient regular trading activity and outstanding notional exposures in the swaps to provide the liquidity necessary for DCOs to successfully risk manage these products and to support a clearing requirement.

Request for Comment

The Commission requests comment regarding whether there are sufficient outstanding notional exposures and trading liquidity in fixed-to-floating interest rate swaps denominated in any or all of the nine additional currencies, during both stressed and non-stressed market conditions, to support a clearing requirement.

2. *Outstanding notional exposures and trading liquidity: AUD-denominated basis swaps.*

The First Clearing Requirement Determination required the clearing of certain USD-, EUR-, GBP-, and JPY-denominated basis swaps. As part of the proposed clearing requirement

determination, the Commission is proposing to amend the basis swap class to include AUD-denominated basis swaps.

According to part 43 data, 366 new AUD-denominated basis swaps were executed during the three-month period from April 1 to June 30, 2015. The aggregate notional value of these swaps was \$32,559,762,900.<sup>70</sup> Also, during this period, there was no volume of AUD-denominated basis swaps cleared at CME, but the outstanding notional in such swaps cleared at CME as of June 30, 2015 was \$69,662,645,400. During the second quarter of 2015, 786 new AUD-denominated basis swaps were cleared at LCH. The aggregate notional

<sup>64</sup> The Commission converted the values to USD as of Sept. 18, 2015. ISDA SwapsInfo does not provide data for CHF-, HKD-, NOK-, SEK-, or SGD-denominated interest rate swaps.

<sup>65</sup> SEF Tracker is published periodically on FIA’s Web site, available at: <https://fia.org/sef-tracker>.

<sup>66</sup> The SEFs include: BGC; Bloomberg; DW; GFI; Javelin; ICAP; IGDL; LatAm; Tradition; trueEx; Tullet Prebon; and TW. The Commission recognizes that under section 2(h)(8) of the CEA and regulations 37.10 and 38.12, the adoption of the clearing requirement proposed herein could result in a trade execution requirement for some or all of the interest rate swaps discussed in this proposal.

<sup>67</sup> The published report does not contain information for CHF-, HKD-, and NOK-denominated interest rate swaps. FIA provided figures for those swaps to the Commission. According to FIA, no SGD-denominated interest rate swaps were transacted on SEFs during the week of May 25, 2015. During the week of July 26, 2015, the aggregate notional amount of SGD-denominated interest rate swaps executed on SEFs was \$7,305,402.

<sup>68</sup> May 2015 edition of FIA SEF Tracker, available at: <https://fia.org/articles/fia-releases-sef-tracker-report-may>.

<sup>69</sup> FIA converted the values to USD.

<sup>70</sup> This figure comes from data that was publically disseminated by DDR and reported to it by the reporting counterparty, a SEF, or designated contract market (DCM) pursuant to part 43. As such, the Commission did not independently verify the accuracy of the swap data. The transactions disseminated to the public were rounded pursuant to regulation 43.4(g). As a result, this figure may underestimate the amount of notional outstanding for the reported trades. This figure does not include cancelled and corrected swaps that counterparties reported under part 43. The Commission converted the aggregate notional amount to USD according to the exchange rates of June 30, 2015.

value of these swaps was \$74,012,261,949. As of July 17, 2015, the outstanding notional value of AUD-denominated basis swaps cleared at CME and LCH was \$183,995,548,759 and \$443,819,944,145, respectively.<sup>71</sup>

While the data considered above comes from limited periods of time that do not explicitly include periods of market stress, the Commission believes that the data demonstrates sufficient regular trading activity and outstanding notional exposures in AUD-denominated basis swaps to provide the

liquidity necessary for DCOs to successfully risk manage these products and to support a clearing requirement.

#### Request for Comment

The Commission requests comment regarding whether there are sufficient outstanding notional exposures and trading liquidity in AUD-denominated basis swaps, during both stressed and non-stressed market conditions, to support a clearing requirement.

3. *Outstanding notional exposures and trading liquidity: AUD, NOK-, PLN-, and SEK-denominated FRAs.*

The First Clearing Requirement Determination required the clearing of certain USD-, EUR-, GBP-, and JPY-denominated FRAs. As part of the proposed clearing requirement determination, the Commission is proposing to amend the FRA class to include AUD-, NOK-, PLN-, and SEK-denominated FRAs.

Table 8 presents aggregate notional values and trade counts of AUD-, NOK-, PLN-, and SEK-denominated FRAs executed during the second quarter of 2015, collected by DDR.

TABLE 8—PART 43 DATA FRAS AGGREGATE NOTIONAL AMOUNTS AND TRADE COUNT REPORTED SECOND QUARTER 2015<sup>72</sup>

Currency	Aggregate notional reported (USD)	Trade count
AUD .....	\$225,910,666,800	1,058
SEK .....	183,646,587,508	514
NOK .....	105,087,098,253	397
PLN .....	14,455,487,594	103

Table 9.1 presents the notional amounts outstanding of NOK-, PLN-, and SEK-denominated FRAs cleared at LCH as of July 17, 2015.

TABLE 9.1—LCH DATA FRAS NOTIONAL OUTSTANDING AS OF JULY 17, 2015

Currency	Notional reported (USD)
SEK .....	\$706,370,365,302
NOK .....	544,670,239,925
PLN .....	274,120,726,256

Table 9.2 presents the aggregate notional values and trade counts of NOK-, PLN-, and SEK-denominated FRAs cleared at LCH during the second quarter of 2015.

TABLE 9.2—LCH DATA FRAS AGGREGATE NOTIONAL AMOUNTS CLEARED AND TRADE COUNT SECOND QUARTER 2015

Currency	Notional reported (USD)	Trade count
SEK .....	\$369,900,226,814	1,600
NOK .....	348,764,102,890	1,874
PLN .....	232,246,791,831	1,029

Table 10.1 presents the notional amounts outstanding of AUD-, NOK-, PLN-, and SEK-denominated FRAs cleared at CME as of July 17, 2015.

TABLE 10.1—CME DATA FRAS OPEN INTEREST AS OF JULY 17, 2015

Currency	Notional reported (USD)
SEK .....	\$1,448,168,085
PLN .....	360,386,524

<sup>71</sup> CME and LCH converted these figures to USD.

<sup>72</sup> This table reflects data that was publically disseminated by DDR and reported to it by the reporting counterparty, a SEF, or DCM pursuant to part 43. As such, the Commission did not

independently verify the accuracy of the swap data. The transactions disseminated to the public were rounded pursuant to regulation 43.4(g). As a result, this table may underestimate the amount of notional outstanding for the reported trades. This

table does not include cancelled and corrected swaps that counterparties reported under part 43. The Commission converted the notional amounts to USD according to the exchange rates of June 30, 2015.

TABLE 10.1—CME DATA FRAS OPEN INTEREST AS OF JULY 17, 2015—Continued

Currency	Notional reported (USD)
NOK .....	122,512,986
AUD .....	0

Table 10.2 presents the aggregate notional values and trade counts of AUD-, NOK-, PLN-, and SEK-denominated FRAs cleared at CME during the second quarter of 2015.

TABLE 10.2—CME DATA FRAS AGGREGATE NOTIONAL AMOUNTS CLEARED AND TRADE COUNT SECOND QUARTER 2015<sup>73</sup>

Currency	Notional reported (USD)	Trade count
SEK .....	\$1,504,300,488	6
AUD .....	0	0
NOK .....	0	0
PLN .....	0	0

The Commission recognizes that the part 43 data provided in Table 8 comes from a limited period of time that does not explicitly include periods of market stress. The Commission also notes the absence of any clearing activity in AUD-denominated FRAs and the absence of clearing activity at CME in NOK, PLN, and SEK during the second quarter of 2015. However, the Commission believes that the part 43 data provided in Table 8 demonstrates sufficient regular trading activity and outstanding notional exposures in AUD-, NOK-, PLN-, and SEK-denominated FRAs to provide the liquidity necessary for DCOs to successfully risk manage these products and to support a clearing requirement. Moreover, the Australian clearing requirement, which took effect

in April 2016, covers AUD-denominated FRAs.<sup>74</sup>

Request for Comment

The Commission requests comment regarding whether there are sufficient outstanding notional exposures and trading liquidity in AUD-, NOK-, PLN, and SEK-denominated FRAs, during both stressed and non-stressed market conditions, to support a clearing requirement.

4. *Outstanding notional exposures and trading liquidity: OIS with termination dates of up to three years.*

The First Clearing Requirement Determination required the clearing of certain USD-, EUR- and GBP-denominated OIS with a stated termination date range of seven days to two years. Interest rate swaps are often

multi-year contracts with termination dates out to 50 years or more depending on the class and currency of the swap. As part of the proposed clearing requirement determination, the Commission is proposing to amend the maximum termination date to three years for USD-, EUR- and GBP-denominated OIS that have been required to be cleared pursuant to the First Clearing Requirement Determination. This would make the Commission's OIS clearing requirement consistent with the one that will take effect in the European Union in 2016.<sup>75</sup>

Table 11 presents aggregate notional values and trade counts of USD-, EUR-, and GBP-denominated OIS with terms of two to three years executed during the second quarter of 2015, collected by DDR.

TABLE 11—PART 43 DATA 2–3 YEAR OIS AGGREGATE NOTIONAL AMOUNTS AND TRADE COUNT REPORTED<sup>76</sup> SECOND QUARTER 2015

Currency	Aggregate notional (USD)	Trade count
EUR .....	\$7,582,189,400	47
USD .....	4,611,000,000	32
GBP .....	1,377,942,400	15

Tables 12 and 13 present the notional amounts outstanding, the aggregate

notional values cleared and trade counts, of USD-, EUR-, and GBP-

denominated OIS with terms of two to three years.

<sup>73</sup> Although there was no clearing activity in NOK- or PLN-denominated FRAs during the second quarter of 2015, CME continues to offer clearing of these products. During the fourth quarter of 2015, CME cleared an aggregate notional amount of \$4.1 billion in AUD-denominated FRAs.

<sup>74</sup> See section I.B.

<sup>75</sup> See discussion of the pending European Union Clearing Obligation in section I.B.

<sup>76</sup> This table reflects data that was publically disseminated by DDR and reported to it by the reporting counterparty, SEF, or DCM pursuant to part 43. As such, the Commission did not independently verify the accuracy of the swaps. The transactions disseminated to the public were rounded pursuant to regulation 43.4(g). As a result, this table may underestimate the amount of notional outstanding for the reported trades. This

table does not include cancelled and corrected swaps that counterparties reported under part 43. The Commission converted the notional amounts to USD according to the exchange rates of June 30, 2015.

<sup>77</sup> LCH converted the EUR and GBP values to USD.

TABLE 12—LCH DATA 2–3 YEAR OIS NOTIONAL OUTSTANDING, AGGREGATE NOTIONAL CLEARED, AND TRADE COUNT <sup>77</sup>

Currency	Notional outstanding as of July 17, 2015 (USD)	Aggregate notional cleared second quarter 2015 (USD)	Trade count second quarter 2015
EUR .....	\$456,729,830,424	\$369,018,669,593	1,252
GBP .....	91,417,244,109	64,071,802,837	187
USD .....	90,058,657,103	46,523,581,500	120

TABLE 13—CME DATA 2–3 YEAR OIS OPEN INTEREST, AGGREGATE NOTIONAL CLEARED, AND TRADE COUNT <sup>78</sup>

Currency	Open interest as of July 17, 2015 (USD)	Aggregate notional cleared second quarter 2015 (USD)	Trade count second quarter 2015
EUR .....	\$53,456,578,566	\$6,888,346,279	12
USD .....	151,923,747,195	9,334,544,737	6
GBP .....	27,764,067,455	857,520,000	4

As part of the proposed clearing requirement determination, the Commission also is proposing to add AUD- and CAD-denominated OIS to the OIS class included in regulation 50.4(a).

This would make the Commission's OIS clearing requirement consistent with the one that is in effect in Australia and that is expected to take effect in Canada in 2017.<sup>79</sup>

Table 14 presents aggregate notional values and trade counts of AUD- and CAD-denominated OIS executed during the second quarter of 2015 collected by DDR.

TABLE 14—PART 43 DATA AUD- AND CAD-OIS AGGREGATE NOTIONAL AMOUNTS AND TRADE COUNT REPORTED <sup>80</sup> SECOND QUARTER 2015

Currency	Aggregate notional (USD)	Trade count
AUD .....	\$307,048,016,016	537
CAD .....	51,645,589,883	107

Tables 15.1 and 15.2 present the notional amounts outstanding, as well as aggregate notional values cleared and

trade counts, of AUD- and CAD-denominated OIS cleared at LCH.

TABLE 15.1—LCH DATA AUD-DENOMINATED OIS NOTIONAL OUTSTANDING, AGGREGATE NOTIONAL CLEARED, AND TRADE COUNT <sup>81</sup>

Currency	Notional outstanding as of January 15, 2016 <sup>82</sup> (USD)	Aggregate notional cleared January 4–15, 2016 (USD)	Trade count January 4–15, 2016
AUD .....	\$25,739,497,700	\$26,199,691,300	25

TABLE 15.2—LCH DATA CAD-DENOMINATED OIS NOTIONAL OUTSTANDING, AGGREGATE NOTIONAL CLEARED, AND TRADE COUNT <sup>83</sup>

Currency	Notional outstanding as of July 17, 2015 (USD)	Aggregate notional cleared second quarter 2015 (USD)	Trade count second quarter 2015
CAD .....	\$506,221,411,997	\$216,524,096,571	260

<sup>78</sup> CME converted the EUR and GBP values to USD.

<sup>79</sup> See discussion of the Australian and proposed Canadian swap clearing requirements in section I.B.

<sup>80</sup> This table reflects data that was publically disseminated by DDR and reported to it by the

reporting counterparty, SEF, or DCM pursuant to part 43. As such, the Commission did not independently verify the accuracy of the swaps. The transactions disseminated to the public were rounded pursuant to regulation 43.4(g). As a result, this table may underestimate the amount of

notional outstanding for the reported trades. This table does not include cancelled and corrected swaps that counterparties reported under part 43. The Commission converted the notional amounts to USD according to the exchange rates of June 30, 2015.

While the Commission recognizes that the data considered above comes from limited periods of time that do not explicitly include periods of market stress, the Commission believes that the data demonstrates sufficient regular trading activity and outstanding notional exposures in USD-, GBP-, and EUR-denominated OIS with a termination date range of two to three years, as well as AUD- and CAD-denominated OIS, to provide the necessary liquidity for DCOs to successfully risk manage these products and to support a clearing requirement.

Request for Comment

The Commission requests comment regarding whether there are sufficient outstanding notional exposures and trading liquidity in the OIS covered by this proposed determination, during both stressed and non-stressed market conditions, to support a clearing requirement.

5. *Pricing data: Fixed-to-floating swaps denominated in the nine additional currencies; AUD-denominated basis swaps; AUD-, NOK-, PLN-, and SEK-denominated FRAs; USD-, GBP, and EUR-OIS with termination dates of up to three years; and AUD- and CAD-OIS.*

The Commission regularly reviews pricing data on the interest rate swaps that are the subject of this proposal and has determined that these swaps are capable of being priced off of deep and liquid markets. Commission staff receives and reviews margin model information from CME, Eurex, LCH, and SGX that addresses how such DCOs would follow particular procedures to

ensure that market liquidity exists in order to exit a position in a stressed market, including the products subject to this proposal. In particular, Commission staff analyzes the level of liquidity in the specific product markets and assesses the time required to determine a price. Based on this information, the Commission staff has no reason to believe that there is, or will be, difficulty pricing the products subject to this proposal in a stressed environment.

Because of the stability of access to pricing data from these markets, the pricing data for non-exotic interest rate swaps that are currently being cleared is generally viewed as reliable. Therefore, the Commission believes that there is adequate pricing data to support a proposed clearing requirement determination.

In addition, CME, Eurex, LCH, and SGX provided information that supports the Commission's conclusion that there is adequate pricing data to warrant a clearing requirement determination in the products subject to this proposal. LCH and CME believe there is adequate pricing data for risk and default management. CME publicly represents that its interest rate swap valuations are fully transparent and rely on pricing inputs obtained from wire service feeds. In its § 39.5(b) submission, SGX asserted that the valuation rate sources it uses, and the manner in which it determines mark-to-market prices, are in alignment with industry practices. CME, Eurex, LCH, and SGX obtain daily prices from third-party data providers, clearing members, and/or major banks.

As discussed above, the Commission reviews margin models and related pricing data submitted by CME, Eurex, LCH, and SGX. One source of information that they use to determine adequate pricing data is a regular survey of swap traders that asks the traders to estimate what it would cost to liquidate positions of different sizes in different currencies. The information obtained during these market participant surveys is incorporated into to each of CME, Eurex, LCH, and SGX's internal margin models so that each is confident that it will be able to withstand stressed market conditions. Establishing accurate pricing data is one component of each of CME, Eurex, LCH, and SGX's ability to risk manage their interest rate swaps offered for clearing. The Commission believes that the methods used by these DCOs provide information on pricing that is accurate and demonstrates the ability to price the products subject to this proposal successfully, now and if they are subject to a clearing requirement.

Request for Comment

The Commission requests comment regarding whether there is adequate pricing data for DCO risk and default management of the products subject to this proposal.

Based on the existence of significant outstanding notional exposures, trading liquidity, and adequate pricing data, the Commission proposes to require that interest rate swaps with the specifications shown in Table 16 be cleared.<sup>84</sup>

TABLE 16—SPECIFICATIONS FOR INTEREST RATE SWAPS TO BE CLEARED IN § 50.4(a)

Specification	Fixed-to-floating swap class					
	Australian Dollar (AUD).	Canadian Dollar (CAD).	Euro (EUR) .....	Hong Kong Dollar (HKD).	Mexican Peso (MXN).	Norwegian Krone (NOK).
1. Currency .....	BBSW .....	CDOR .....	EURIBOR .....	HIBOR .....	TIIE .....	NIBOR.
2. Floating Rate Indexes .....	28 days to 30 years.	28 days to 30 years.	28 days to 50 years.	28 days to 10 years.	28 days to 21 years.	28 days to 10 years.
3. Stated Termination Date Range.	No .....	No .....	No .....	No .....	No .....	No.
4. Optionality .....	No .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts	No .....	No .....	No .....	No .....	No .....	No.

Specification	Fixed-to-floating swap class						
	Polish Zloty (PLN).	Singapore Dollar (SGD).	Swedish Krona (SEK).	Swiss Franc (CHF).	Sterling (GBP).	U.S. Dollar (USD).	Yen (JPY).
1. Currency .....	WIBOR .....	SOR-VWAP ..	STIBOR .....	LIBOR .....	LIBOR .....	LIBOR .....	LIBOR.
2. Floating Rate Indexes .....	28 days to 10 years.	28 days to 10 years.	28 days to 15 years.	28 days to 30 years.	28 days to 50 years.	28 days to 50 years.	28 days to 30 years.
3. Stated Termination Date Range.	No .....	No .....	No .....	No .....	No .....	No .....	No.
4. Optionality .....	No .....	No .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No .....	No .....	No.

<sup>81</sup> LCH converted the AUD values to USD.

<sup>82</sup> LCH began clearing AUD-denominated OIS on January 4, 2016.

<sup>83</sup> LCH converted the CAD values to USD.

<sup>84</sup> This information also appears in revised regulation 50.4(a). See section III.



Specification							
6. Conditional Notional Amounts.	No .....	No .....	No .....	No .....	No .....	No .....	No.

Specification	Basis swap class				
1. Currency .....	Australian Dollar (AUD).	Euro (EUR) .....	Sterling (GBP) .....	U.S. Dollar (USD)	Yen (JPY).
2. Floating Rate Indexes .....	BBSW .....	EURIBOR .....	LIBOR .....	LIBOR .....	LIBOR.
3. Stated Termination Date Range .....	28 days to 30 years.	28 days to 50 years.	28 days to 50 years.	28 days to 50 years.	28 days to 30 years.
4. Optionality .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No .....	No.

Specification	Forward rate agreement class			
1. Currency .....	Australian Dollar (AUD).	Euro (EUR) .....	Polish Zloty (PLN) .....	Norwegian Krone (NOK).
2. Floating Rate Indexes .....	BBSW .....	EURIBOR .....	WIBOR .....	NIBOR.
3. Stated Termination Date Range .....	3 days to 3 years .....	3 days to 3 years .....	3 days to 2 years .....	3 days to 2 years.
4. Optionality .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No.

Specification	Forward rate agreement class			
1. Currency .....	Swedish Krona (SEK)	Sterling (GBP) .....	U.S. Dollar (USD) .....	Yen (JPY).
2. Floating Rate Indexes .....	STIBOR .....	LIBOR .....	LIBOR .....	LIBOR.
3. Stated Termination Date Range .....	3 days to 3 years .....	3 days to 3 years .....	3 days to 3 years .....	3 days to 3 years.
4. Optionality .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No.

Specification	Overnight index swap class				
1. Currency .....	Australian Dollar (AUD).	Canadian Dollar (CAD).	Euro (EUR) .....	Sterling (GBP) .....	U.S. Dollar (USD).
2. Floating Rate Indexes .....	AONIA-OIS .....	CORRA-OIS .....	EONIA .....	SONIA .....	FedFunds.
3. Stated Termination Date Range .....	7 days to 2 years	7 days to 2 years	7 days to 3 years	7 days to 3 years	7 days to 3 years.
4. Optionality .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No .....	No.

#### Request for Comment

The Commission requests comment as to whether it should consider other data to determine whether outstanding notional exposures, trading liquidity, or adequate pricing data are sufficient to support this proposed clearing requirement. If so, please provide or identify any additional data that may assist the Commission in this regard.

The Commission also requests comment as to whether fixed-to-floating interest rate swaps denominated in certain of the nine additional currencies are more or less suitable for a clearing requirement in terms of outstanding notional values, trading liquidity, or pricing data. In addition, the Commission requests comment regarding whether other evidence or criteria should inform the Commission's assessment that the swaps covered by this proposal are suitable for clearing.

Finally, the Commission requests comment about the types of swap counterparties that would be affected by the proposed determination. For

example, as noted above, under the Commission's general policy the clearing requirement would not apply to swaps involving non-U.S. counterparties in certain situations.<sup>85</sup> The Commission also notes that the exception and exemptions that currently apply to the existing swap clearing requirement would also apply to the proposed clearing requirement.<sup>86</sup>

*b. Factor (II)—Availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure.*

<sup>85</sup> See section II.B.iii.a.1. Under the Commission's general policy, the clearing requirement does not apply to a swap where neither counterparty is a U.S. person (although these requirements generally would apply, with the possibility of substituted compliance, to certain swaps involving foreign branches of U.S. swap dealers or major swap participants, or non-U.S. persons that are guaranteed by or affiliate conduits of U.S. persons). See Interpretive Guidance and Policy Statement Regarding Compliance With Certain Swap Regulations, 78 FR 45292, 45369–70 (July 26, 2013).

<sup>86</sup> The exception and exemptions to the clearing requirement are codified in subpart C to part 50 of the Commission's regulations.

Section 2(h)(2)(D)(ii)(II) of the CEA requires the Commission to take into account the availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear the proposed classes of swaps on terms that are consistent with the material terms and trading conventions on which they are now traded. The Commission believes that CME, Eurex, LCH, and SGX have developed rule frameworks, capacity, operational expertise and resources, and credit support infrastructure to clear the interest rate swaps they currently clear, including those products subject to this proposal, on terms that are consistent with the material terms and trading conventions on which those swaps are being traded.

The Commission subjects CME, Eurex, LCH, and SGX to ongoing review and risk surveillance programs to ensure compliance with the core principles for

the submitted swaps.<sup>87</sup> As discussed above, as part of a registered DCO's initial registration review and periodic in-depth reviews thereafter, the Commission reviews the DCO's rule framework, capacity, and operational expertise and resources to clear the submitted swaps. The Commission may request that the DCO or DCO applicant change its rules to comply with the CEA and Commission regulations.

After registration, the Commission conducts examinations of DCOs to determine whether the DCO is in compliance with the CEA and Commission regulations. Moreover, Commission risk surveillance staff monitors the risks posed to and by the DCO, in ways that include regularly conducting back testing to review margin coverage at the product level and following up with the DCO and its clearing members regarding any exceptional results.

CME, Eurex, LCH, and SGX have procedures pursuant to which they regularly review their clearing of the interest rate swaps subject to this proposal in order to confirm, or make adjustments to, margins and other risk management tools. When reviewing CME, Eurex, LCH, and SGX's risk management tools, the Commission considers whether the DCO is able to manage risk during stressed market conditions to be one of the most significant considerations.

CME, Eurex, LCH, and SGX have developed detailed risk-management practices, including a description of the risk factors considered when establishing margin levels such as historical volatility, intraday volatility, seasonal volatility, liquidity, open interest, market concentration, and potential moves to default, among other risks.<sup>88</sup> The Commission reviews and

oversees CME's, Eurex's, LCH's, and SGX's risk management practices and development of margin models. Margin models are further refined by stress testing and daily back testing. When assessing whether CME, Eurex, LCH, and SGX can clear swaps safely during stressed market conditions, stress testing and back testing are key tools the Commission considers as well.

CME, Eurex, LCH, and SGX design stress tests to simulate "extreme but plausible" market conditions based on historical analysis of product movements and/or based on hypothetical forward-looking scenarios that are created with the assistance of market experts and participants. Commission staff monitors and oversees the use and development of these stress tests. CME, Eurex, LCH, and SGX conduct stress tests daily. In addition, CME, Eurex, LCH, and SGX conduct reverse stress testing to ensure that their default funds are sized appropriately. Reverse stress testing uses plausible market movements that could deplete guaranty funds and cause large losses for top clearing members.<sup>89</sup> These four DCOs analyze the results of stress tests and reverse stress tests to determine if any changes to their financial resources or margin models are necessary. Commission risk surveillance staff also monitors markets in real-time and also performs stress tests against the DCOs' margin models as an additional level of oversight, and may recommend changes to a margin model.

CME, Eurex, LCH, and SGX conduct back testing on a daily basis to ensure that the margin models capture market movements for member portfolios. Back testing serves two purposes: it tests margin models to determine whether they are performing as intended and it checks whether the margin models produce margin coverage levels that meet the DCO's established standards. CME conducts daily back testing for each major asset class, and SGX

performs daily back testing on a contract level to examine margin models in more detail. LCH may call additional margin from clearing members if back testing demonstrates margin erosion. The back testing process helps CME, Eurex, LCH, and SGX determine whether their clearing members satisfy the required margin coverage levels and liquidation time frame.

Before offering a new product for clearing, such as the interest rate swaps subject to this proposal, CME, Eurex, LCH, and SGX take stress tests and back testing results into account to determine whether the clearinghouse has sufficient financial resources to offer new clearing services. In addition, the Commission reviews margin models and default resources to ensure that the DCOs can risk manage their portfolio of products offered for clearing. The Commission believes that this combination of stress testing and back testing in anticipation of offering new products for clearing provides CME, Eurex, LCH, and SGX with greater certainty that new product offerings will be risk-managed appropriately. The process of stress testing and back testing also gives the DCOs practice incorporating the new product into their models.

In addition to the Commission's surveillance and oversight, CME, Eurex, LCH, and SGX continue to monitor and test their margin models over time so that they can operate effectively in stressed and non-stressed market environments. CME, Eurex, LCH, and SGX review and validate their margin models regularly and in the case of CME and SGX, no less than annually. CME and LCH use the following additional measures to risk manage their margin coverage levels for interest rate swaps denominated in various currencies, including: Regularly surveying traders to estimate what it would cost to liquidate positions of different sizes in different currencies and then incorporating those costs into the amount of initial margin that a clearing member is required to post, and tailoring their margin models to account for several attributes specific to various currencies.

Finally, aside from margin coverage requirements, CME, Eurex, LCH, and SGX can monitor and manage credit risk exposure by asset class, clearing member, account, or even by individual customers. They manage credit risk by establishing position and concentration limits based on product type or counterparty. The Commission recognizes that these limits reduce potential market risks so that DCOs are better able to withstand stressed market conditions. CME, Eurex, LCH, and SGX

<sup>87</sup> Section 5c(c) of the CEA governs the procedures for review and approval of new products, new rules, and rule amendments submitted to the Commission by DCOs. Parts 39 and 40 of the Commission's regulations implement section 5c(c) by: (i) Establishing specific requirements for compliance with the core principles as well as procedures for registration, implementing DCO rules, and clearing new products; and (ii) establishing provisions for a DCO's submission of rule amendments and new products to the Commission.

<sup>88</sup> Each of CME, Eurex, LCH, and SGX has published a document outlining its compliance with the Principles for Financial Market Infrastructures ("PFMIs") published by the Committee on Payments and Market Infrastructures ("CPMI" formerly CPSS) and the International Organization of Securities Commissions ("IOSCO"). See CME Clearing: Principles for Financial Market Infrastructures Disclosure, available at: <http://www.cmegroup.com/clearing/risk-management/files/cme-clearing-principles-for-financial-market-infrastructures-disclosure.pdf>. See Assessment of Eurex Clearing AG's compliance against the CPSS-

IOSCO Principles for financial market infrastructures (PFMI) and disclosure framework associated to the PFMIs, available at: [http://www.eurexclearing.com/blob/148684/58e6fe89e3f54ebe169e530ac2235b43/data/cps-iosco-pfmi-assessment\\_2014\\_en.pdf](http://www.eurexclearing.com/blob/148684/58e6fe89e3f54ebe169e530ac2235b43/data/cps-iosco-pfmi-assessment_2014_en.pdf). See LCH's CPMI-IOSCO Self Assessment 2014, available at: [http://www.lchclearnet.com/documents/731485/762558/CPMI\\_IOSCO\\_Assessment\\_of\\_LCH+ClearnetLtd+2014.pdf/45876bd6-3818-4b76-a463-2952a613c326](http://www.lchclearnet.com/documents/731485/762558/CPMI_IOSCO_Assessment_of_LCH+ClearnetLtd+2014.pdf/45876bd6-3818-4b76-a463-2952a613c326). See SGX PFMI Disclosure Documents, available at: [http://www.sgx.com/wps/portal/sgxweb/home/clearing/derivatives/pfmi\\_disclosure](http://www.sgx.com/wps/portal/sgxweb/home/clearing/derivatives/pfmi_disclosure).

<sup>89</sup> For example, CME, Eurex, LCH, and SGX may use scenarios for stress testing and reverse stress testing that capture, among other things, historical price volatilities, shifts in price determinants and yield curves, multiple defaults over various time horizons, and simultaneous pressures in funding and asset markets.

monitor exposure concentrations and may require additional margin deposits for clearing members with weak credit scores, with large or concentrated positions, with positions that are illiquid or exhibit correlation with the member itself, and/or where the member has particularly large exposures under stress scenarios. The ability to call for any additional margin, on top of collecting initial and variation margin, to meet the current DCO exposure is another tool that CME, Eurex, LCH, and SGX may use to protect against stressed market conditions.

In support of its ability to clear the products subject to this proposal, CME's § 39.5(b) submission cites to its rulebook to demonstrate the availability of rule framework, capacity, operational expertise and resources, and credit support infrastructure to clear interest rate swap contracts on terms that are consistent with the material terms and trading conventions on which the contracts are then traded. LCH's submissions state that LCH has the capability and expertise not only to manage the risks inherent in the current book of interest rate swaps cleared, but also to manage the increased volume that a clearing requirement for additional currently clearable products could generate. SGX's submission states that SGD-denominated fixed-to-floating interest rate swaps are cleared under an established rule framework and operational infrastructure that has been accepted by SGX's clearing members. SGX asserted further that it has the appropriate risk management, operations, and technology capabilities in place to ensure that it is able to liquidate positions in these swaps in an orderly manner should a default occur. Similarly, Eurex's submission states that it clears interest rate swaps pursuant to its well-developed rule framework and support infrastructure.

Importantly, the Commission notes that CME, Eurex, LCH, and SGX each developed their interest rate swap clearing offerings in conjunction with market participants and in response to the specific needs of the marketplace. In this manner, CME's, Eurex's, LCH's, and SGX's clearing services are designed to be consistent with the material terms and trading conventions of a bilateral, uncleared market.

When assessing whether CME, Eurex, LCH, and SGX can clear the swaps subject to this proposed clearing requirement determination safely during times of market stress, the Commission reviewed the public disclosures published by CME, Eurex, LCH, and SGX. In addition, the Commission reviewed the risk management practices

used by these DCOs, and the Commission has determined that the application of such practices to the products subject to this proposed clearing requirement determination should ensure that the products can be cleared safely during times of market stress.

Therefore, the Commission is proposing this clearing requirement determination.

#### Request for Comment

The Commission requests comments concerning all aspects of this factor, including whether commenters agree that CME, Eurex, LCH, and SGX can satisfy the factor's requirements. In particular, the Commission seeks comment regarding whether CME, Eurex, LCH, and SGX have the ability to clear the swaps subject to this proposed clearing requirement during times of market stress.

#### *c. Factor (III)—Effect on the mitigation of systemic risk.*

Section 2(h)(2)(D)(ii)(III) of the CEA requires the Commission to take into account the effect of the clearing requirement 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. The Commission believes that the market for the swaps covered by this proposed determination is significant and that mitigating counterparty risk through clearing likely would reduce systemic risk in that market generally. Data collected by SDRs demonstrates that Commission-registered SDs are counterparties to an overwhelming majority of swaps reported to the Commission. Because only SDs with a significant volume of swaps activity are required to register with the Commission,<sup>90</sup> by expanding the swap clearing requirement, a greater percentage of an SD's swap activity will be centrally cleared and risk managed. For example, central clearing reduces the interconnectedness of the swap positions of SDs, and other swap market participants, because the DCO, an independent third party that takes no market risk, guarantees the collateralization of swap counterparties' exposures. Mitigating counterparty credit risk for SDs with systemically important swap positions through clearing likely would reduce systemic risk in the swap market and the financial system as a whole.<sup>91</sup>

<sup>90</sup> See definition of SD, codified in Commission regulation 1.3(ggg).

<sup>91</sup> In its § 39.5(b) submission, SGX asserts that central clearing reduces counterparty credit risk because the central counterparty interposes itself between the initial buyer and seller and because

In addition to managing counterparty credit risk, centrally clearing the swaps covered by this proposal through a DCO will reduce systemic risk through the following means: Providing counterparties with daily mark-to-market valuations and exchange of variation margin pursuant to a risk management framework; requiring posting of initial margin to cover potential future exposures in the event of a default; offering multilateral netting to substantially reduce the number and notional amount of outstanding bilateral positions; reducing swap counterparties' operational burden by consolidating collateral management and cash flows; eliminating the need for novations or tear-ups because clearing members may offset opposing positions; and increasing transparency.

The Commission recognizes that the recently issued margin requirements for uncleared swaps for SDs and MSPs will require some market participants to post and collect margin for those swaps not subject to the Commission's clearing requirement.<sup>92</sup> This margin requirement was not finalized at the time the Commission issued the First Clearing Requirement Determination. As a result, the Commission considered the clearing requirement in light of existing market practice. Going forward, the requirement to margin uncleared swaps in certain instances will mitigate the accumulation of risk between counterparties in a manner similar to that of central clearing. However, the Commission believes that central clearing, including required clearing such as that proposed herein, offers greater risk mitigation than bilateral margining for swaps that are sufficiently standardized and meet the Commission's other requirements for suitability. First, absent any applicable exception or exemption,<sup>93</sup> this clearing requirement would apply to all transactions in the swaps covered by this proposal, whereas the uncleared margin requirements apply only to swaps executed by SDs, MSPs, and certain "financial end-users."<sup>94</sup> Second, this clearing requirement would require all swap counterparties to post initial margin with a DCO, whereas under the uncleared swap margin requirements, for certain swaps, specifically those

clearing creates efficiencies through the consolidation of collateral management.

<sup>92</sup> Margin Requirements for Uncleared Swaps for SDs and MSPs (final rule), 81 FR 636 (Jan. 6, 2016) (codified in subpart E of part 23 of the Commission's regulations).

<sup>93</sup> The exception and exemptions to the clearing requirement are codified in subpart C to part 50 of the Commission's regulations.

<sup>94</sup> Regulations 23.152 and 23.153.

between an SD or MSP and a financial end-user, initial margin is required to be posted and collected only if the financial end-user (together with its affiliates) has over \$8 billion in gross notional exposures for uncleared swaps.<sup>95</sup> Third, swaps transacted through a DCO are secured by the DCO's guaranty fund and other available financial resources, which are intended to cover extraordinary losses that would not be covered by initial margin ("tail risk"), whereas swaps subject to the uncleared margin requirements are not secured by a guaranty fund or other financial resources available to the DCO but covered by unencumbered assets of the counterparty.

In their § 39.5(b) submissions, CME, Eurex, and LCH submit that subjecting interest rate swaps to central clearing helps mitigate systemic risk. According to LCH, if all clearable swaps are required to be cleared, then from a systemic risk perspective there will be a less disparate marketplace. CME believes that the 2008 financial crisis demonstrated the potential for systemic risk arising from the interconnectedness of over-the-counter (OTC) derivatives market participants and believes that centralized clearing will reduce systemic risk.

While a clearing requirement removes a large portion of the interconnectedness of current OTC markets that leads to systemic risk, the Commission notes that central clearing, by its very nature, concentrates risk in a handful of entities. Similarly, SGX noted that the risk reducing and other benefits of central clearing must be weighed against the concentration of risk in a few clearinghouses. However, the Commission observes that central clearing was developed and designed to handle such concentration of risk.

Moreover, as discussed at length above, the Commission's review and risk surveillance programs monitor and attempt to mitigate potential risks that can arise in derivatives clearing activities for the DCO, its members, and other entities using the DCO's services.

Part of a DCO's risk management framework includes procedures for responding in stressed circumstances, such as a clearing member's default on its obligations. As discussed below, each of CME, Eurex, LCH, and SGX has a procedure for closing out and/or transferring a defaulting clearing member's positions and collateral.<sup>96</sup>

Transferring customer positions to solvent clearing members in the event of a default is critical to reducing systemic risk. DCOs are designed to withstand defaulting positions and to prevent a defaulting clearing member's loss from spreading further and triggering additional defaults. If the introduction of this clearing requirement for interest rate swaps increases the number of clearing members and market participants in the swap market, then DCOs may find it easier to transfer positions from defaulting clearing members if there is a larger pool of potential clearing members to receive the positions. If this were to occur, then the Commission's interest rate swap clearing requirement proposal would reduce systemic risk by increasing the number of clearing members and market participants in these swaps, which is expected to provide DCOs with additional recipients for defaulting clearing members' positions in the event of a default.

Each DCO has experience risk managing interest rate swaps, and the Commission has determined that each of CME, Eurex, LCH, and SGX has the necessary resources available to clear the swaps that are the subject of its submission.

Accordingly, the Commission believes that CME, Eurex, LCH, and SGX would be able to manage the risk posed by clearing the additional swaps that would be required to be cleared by virtue of this expanded clearing requirement. In addition, the Commission believes that the central clearing of the interest rate swaps that are the subject of this proposal would serve to mitigate counterparty credit risk, and might increase the number of clearing members and market participants in these swaps, thereby potentially reducing systemic risk. Having taken into account the likely effect on the mitigation of systemic risk, the Commission is proposing this clearing requirement.

#### Request for Comment

The Commission requests comments concerning the proposed clearing requirement's effect on reducing systemic risk. Would the proposed clearing requirement increase the risk to CME, Eurex, LCH, SGX, or any other entity? If so, please explain why. The Commission also requests comment on whether CME, Eurex, LCH, and SGX are each capable of handling any increased risk that would result from the proposed

clearing requirement, including in stressed market conditions.

#### d. Factor (IV)—Effect on competition.

Section 2(h)(2)(D)(ii)(IV) of the CEA requires the Commission to take into account the effect on competition, including appropriate fees and charges applied to clearing. As discussed above, of particular concern to the Commission is whether this proposed determination would harm competition by creating, enhancing, or entrenching market power in an affected product or service market, or facilitating the exercise of market power. Market power is viewed as the ability to raise price, including clearing fees and charges, reduce output, diminish innovation, or otherwise harm customers as a result of diminished competitive constraints or incentives.

The Commission has identified one putative service market as potentially affected by this proposed clearing determination: A DCO service market encompassing those clearinghouses that currently clear the interest rate swaps subject to this proposal, *i.e.*, CME, Eurex, LCH, and SGX. Without defining the precise contours of this market at this time, the Commission recognizes that, depending on the interplay of several factors, this proposed clearing requirement potentially could impact competition within the affected market. Of particular importance to whether any impact is, overall, positive or negative, is: (1) Whether the demand for these clearing services and swaps is sufficiently elastic that a small but significant increase above competitive levels would prove unprofitable because users of the interest rate swap products and DCO clearing services would substitute other clearing services co-existing in the same market(s); and (2) the potential for new entry into this market. The availability of substitute clearing services to compete with those encompassed by this proposed determination, and the likelihood of timely, sufficient new entry in the event prices do increase above competitive levels, each operate independently to constrain anticompetitive behavior.

Any competitive import likely would stem from the fact that the proposed determination would remove the alternative of not clearing for interest rate swaps subject to this proposal. The proposed determination would not specify who may or may not compete to provide clearing services for the interest rate swaps subject to this proposal (as well as those not required to be cleared).

Removing the uncleared option through this proposed rulemaking is not determinative of negative competitive impact. Other factors—including the availability of other substitutes within

<sup>95</sup> Regulation 23.152.

<sup>96</sup> For further discussion of treatment of customer and swap counterparty positions, funds and property in the event of a the insolvency of a DCO or one or more of its clearing members, please see

Factor (V)—Legal certainty in the event of insolvency. See section II.B.iii.e.

the market or potential for new entry into the market—may constrain market power. The Commission does not foresee that the proposed determination constructs barriers that would deter or impede new entry into a clearing services market.<sup>97</sup> Indeed, there is some basis to expect that the determination could foster an environment conducive to new entry. For example, the proposed clearing determinations, and the prospect that more may follow, is likely to reinforce, if not encourage, growth in demand for clearing services. Demand growth, in turn, can enhance the sales opportunity, a condition hospitable to new entry.<sup>98</sup>

#### Request for Comment

The Commission requests comment on the extent to which: (1) Entry barriers currently do or do not exist with respect to a clearing services market for the interest rate swaps subject to this proposal; (2) the proposed determinations may lessen or increase these barriers; and (3) the proposed determinations otherwise may encourage, discourage, facilitate, and/or dampen new entry into the market. In addition to what is noted above, the Commission requests comment, and quantifiable data, on whether the required clearing of any or all of these swaps will create conditions that create, increase, or facilitate an exercise of: (1) Clearing services market power in CME, Eurex, LCH, SGX, and/or any other clearing service market participant, including conditions that would dampen competition for clearing services and/or increase the cost of clearing services; and/or (2) market power in any product markets for

<sup>97</sup> That said, the Commission recognizes that (1) to the extent the clearing services market for the interest rate swaps identified in this proposal, after foreclosing uncleared swaps, would be limited to a concentrated few participants with highly aligned incentives, and (2) the clearing services market is insulated from new competitive entry through barriers—e.g., high sunk capital cost requirements; high switching costs to transition from embedded incumbents; and access restrictions—the proposed determination could have a negative competitive impact by increasing market concentration.

<sup>98</sup> See, e.g., U.S. Dep't. of Justice & Fed. Trade Comm'n., *Horizontal Merger Guidelines* (2010) section 9.2 (entry likely if it would be profitable which is in part a function of “the output level the entrant is likely to obtain”). In addition, the Commission notes that there are clearing organizations that clear the products subject to the determination proposed today that are not Commission-registered DCOs: (1) OTC Clearing Hong Kong Ltd., which the Commission has exempted from DCO registration and clears HKD-denominated interest rate swaps; (2) ASX Clear (Futures) Pty Ltd. (Australia), which the Commission has also exempted from DCO registration and clears AUD-denominated interest rate swaps; and (3) Asigna (Mexico), which clears MXN-denominated interest rate swaps.

interest rate swaps, including conditions that would dampen competition for these product markets and/or increase the cost of interest rate swaps identified in this proposal. The Commission seeks comment, and quantifiable data, on the likely cost increases associated with clearing, particularly those fees and charges imposed by DCOs, and the effects of such increases on counterparties currently participating in the market. The Commission also seeks comment regarding the effect of competition on DCO risk management. The Commission also welcomes comment on any other aspect of this factor.

#### e. Factor (V)—Legal certainty in the event of insolvency.

Section 2(h)(2)(D)(ii)(V) of the CEA requires the Commission to take into account 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 Commission is proposing this clearing requirement based on its view that there is reasonable legal certainty with regard to the treatment of customer and swap counterparty positions, funds, and property in connection with cleared swaps, namely the fixed-to-floating interest rate swaps, basis swap, OIS, and FRAs subject to this proposal, in the event of the insolvency of the relevant DCO (CME, LCH, or SGX) or one or more of the DCO's clearing members.<sup>99</sup>

The Commission concludes that, in the case of a clearing member insolvency at CME, where the clearing member is the subject of a proceeding under the U.S. Bankruptcy Code, subchapter IV of Chapter 7 of the U.S. Bankruptcy Code (11 U.S.C. 761–767) and parts 22 and 190 of the Commission's regulations would govern the treatment of customer positions.<sup>100</sup> Pursuant to section 4d(f) of the CEA, a clearing member accepting funds from a customer to margin a cleared swap must

<sup>99</sup> The Commission is not discussing Eurex in terms of this factor because Eurex's DCO registration order does not currently permit Eurex to clear for customers. See Eurex DCO registration order, available at: <http://www.cftc.gov/idc/groups/public/@otherifj/documents/ifdocs/orgdcoeurxclorder212016.pdf>.

<sup>100</sup> The Commission observes that a FCM or DCO also may be subject to resolution under Title II of the Dodd-Frank Act to the extent it would qualify as covered financial company (as defined in section 201(a)(8) of the Dodd-Frank Act). Under Title II, different rules would apply to the resolution of an FCM or DCO. Discussion in this section relating to what might occur in the event an FCM or DCO defaults or becomes insolvent describes procedures and powers that exist in the absence of a Title II receivership.

be a registered FCM. Pursuant to 11 U.S.C. 761–767 and part 190 of the Commission's regulations, the customer's interest rate swap positions, carried by the insolvent FCM, would be deemed “commodity contracts.”<sup>101</sup> As a result, neither a clearing member's bankruptcy nor any order of a bankruptcy court could prevent CME from closing out/liquidating such positions. However, customers of clearing members would have priority over all other claimants with respect to customer funds that had been held by the defaulting clearing member to margin swaps, such as the interest rate swaps subject to this proposal.<sup>102</sup> Thus, customer claims would have priority over proprietary claims and general creditor claims. Customer funds would be distributed to swap customers, including interest rate swap customers, in accordance with Commission regulations and section 766(h) of the Bankruptcy Code. Moreover, the Bankruptcy Code and the Commission's rules thereunder (in particular 11 U.S.C. 764(b) and 17 CFR 190.06) permit the transfer of customer positions and collateral to solvent clearing members.

Similarly, 11 U.S.C. 761–767 and part 190 would govern the bankruptcy of a DCO where the DCO is the subject of a proceeding under the U.S. Bankruptcy Code, in conjunction with DCO rules providing for the termination of outstanding contracts and/or return of remaining clearing member and customer property to clearing members.

With regard to LCH, the Commission understands that the default of a clearing member of LCH would be governed by the rules of that DCO. LCH, a DCO based in the United Kingdom, has represented that pursuant to European Union law, LCH's rules would supersede English insolvency laws.<sup>103</sup> Under its rules, LCH would be permitted to close out and/or transfer positions of a defaulting clearing member that is an FCM pursuant to the U.S. Bankruptcy Code and part 190 of the Commission's regulations. According to LCH's submission, the insolvency of LCH itself would be

<sup>101</sup> If an FCM is also registered as a broker-dealer, certain issues related to its insolvency proceeding would also be governed by the Securities Investor Protection Act.

<sup>102</sup> Claims seeking payment for the administration of customer property would share this priority.

<sup>103</sup> The U.K. is bound by European Union legislation, including the Settlement Finality Directive (Council Directive 98/26/EC). The U.K.'s implementing legislation (The Financial Markets and Insolvency (Settlement Finality) Regulations 1999) acts to disapply, in certain instances, national U.K. insolvency law in favor of the rules of a designated system, and LCH has been so designated.

governed by English insolvency law, which protects the enforceability of the default-related provisions of LCH's rulebook, including in respect of compliance with applicable provisions of the U.S. Bankruptcy Code and part 190 of the Commission's regulations. LCH has obtained, and shared with the Commission, legal opinions that support 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 of its clearing members.<sup>104</sup>

With regard to SGX, the Commission understands that the default of an SGX clearing member, or SGX itself, would be governed by Singapore law, except for certain SGX rules relating to cleared swaps customer collateral, as part 22 of the Commission's regulations defines that term, which are governed by U.S. law. Like LCH, SGX has obtained, and shared with the Commission, a legal opinion that support the existence of such legal certainty.<sup>105</sup>

#### Request for Comment

The Commission requests comment as to whether there is reasonable legal certainty, in the event of an insolvency of CME, LCH, SGX, or one or more of any of these DCO's clearing members, with regard to the treatment of customer and swap counterparty positions, funds, and property. Specifically, the Commission requests comment on whether U.S. swap counterparties have concerns about the applicability of English or Singapore law to U.S. persons clearing swaps at LCH or SGX.

### III. Proposed Amended Regulation 50.4(a)

The Commission promulgated regulation 50.4 as part of the First Clearing Requirement Determination.<sup>106</sup> Regulation 50.4 sets forth the basic specifications of the classes of swaps that the Commission has required to be cleared in order to allow counterparties contemplating entering into a swap to quickly determine whether or not the particular swap may be subject to a clearing requirement.<sup>107</sup> Paragraph (a) of regulation 50.4 sets forth the four classes of interest rate swaps that are currently required to be cleared pursuant to the First Clearing Requirement Determination.

For the reasons discussed above, the Commission is proposing to amend regulation 50.4(a) as follows: (i) Adding fixed-to-floating interest rate swaps denominated in the nine additional currencies; (ii) adding AUD-denominated basis swaps; (iii) adding AUD-, NOK-, PLN-, and SEK-denominated FRAs; (iv) changing the maximum stated termination date for USD-, GBP-, and EUR-denominated OIS to three years from two years; and (v) adding AUD- and CAD-denominated OIS. The specifications of the swaps set forth in revised regulation 50.4(a) are consistent with those that are the subject of clearing requirements proposed or issued by other jurisdictions.<sup>108</sup>

### IV. Proposed Implementation Schedule

The Commission phased in compliance with the First Clearing Requirement Determination according to the schedule contained in regulation 50.25.<sup>109</sup> Under this schedule, compliance was phased in by the type of market participant entering into a swap subject to the new determination. The phase-in took place during a period of 270 days following publication of the final version of the clearing requirement determination in the **Federal Register**. The Commission proposes not to phase in compliance with the proposed expanded fixed-to-floating swap, basis swap, FRA, and OIS classes.

Regulation 50.25 provides the Commission with the discretion to phase in compliance. Regulation 50.25(b) provides that upon issuing a clearing requirement determination under section 2(h)(2) of the Act, the Commission *may* determine, based on the group, category, type, or class of swaps subject to such determination, that the specified schedule for compliance with the requirements of section 2(h)(1)(A) of the Act shall apply. The Commission believes that most market participants that would be subject to the proposed clearing requirement already clear the types of interest rate swaps subject to the existing clearing requirement. The Commission does not expect that these market participants would need to connect to DCOs, document new client clearing arrangements, or otherwise prepare themselves and their customers in order to comply with the proposed clearing requirement as they may have needed to do in order to comply with

the First Clearing Requirement Determination.

In addition, whereas upon publication of the First Clearing Requirement Determination, the Commission was uncertain as to whether various types of market participants were ready to submit swaps for clearing,<sup>110</sup> currently a cross-section of market participants clear swaps. Therefore, the Commission believes that it would be reasonable to expect market participants to comply with the proposed clearing requirement 60 days after the final determination is published in the **Federal Register**. That would be consistent with the effective date of most Commission regulations.

As described above, the Commission recognizes that multiple non-U.S. jurisdictions have taken steps to promulgate clearing requirements for the interest rate swaps covered by this proposal.<sup>111</sup> The Commission also understands that most of the other non-U.S. clearing requirements discussed in this proposal will take effect before the end of 2016. However, given that each jurisdiction must follow its own law and practice, the Commission cannot be certain precisely when some non-U.S. clearing requirements will take effect.

Due to the fact that each of those other clearing requirements is being implemented on a different schedule, and each schedule involves multiple steps, the Commission is considering two alternative implementation scenarios. The Commission seeks to create an implementation schedule that results in workable adoption of the swaps clearing requirements discussed in this proposal and is requesting comment and feedback on each of the proposed scenarios below.

#### A. Implementation Scenario I— Simultaneous Effective Date

First, the Commission is considering publishing a final rule to implement the clearing requirement for all products discussed in this proposal at the same time. Market participants subject to the Commission's jurisdiction would be required to comply with the clearing requirement for these interest rate swaps products 60 days after the Commission's final rule is published in the **Federal Register**. Under this scenario, some interest rate swaps products could be subject to a clearing requirement in the U.S. before there is an analogous clearing requirement in a non-U.S. jurisdiction.

As noted earlier, for all swaps subject to this proposal, the Commission

<sup>104</sup> Letters of counsel on file with the Commission.

<sup>105</sup> Letter of counsel on file with the Commission.

<sup>106</sup> Clearing Requirement Determination Under Section 2(h) of the CEA, 77 FR 74284 (Dec. 13, 2012).

<sup>107</sup> *Id.*

<sup>108</sup> See discussion of clearing requirements in other jurisdictions in section I.B.

<sup>109</sup> See Swap Transaction Compliance and Implementation Schedule: Clearing Requirement Under Section 2(h) of the CEA, 77 FR 44441 (July 30, 2012).

<sup>110</sup> *Id.* at 44442.

<sup>111</sup> See section I.B describing existing and potential clearing requirements in other jurisdictions.

expects that a similar clearing requirement in the non-U.S. jurisdiction will be forthcoming. As of the date of this proposal, the clearing requirements have become effective for the (i) AUD-denominated fixed-to-floating, basis, FRA, and OIS swaps, and (ii) MXN-denominated fixed-to-floating swaps. For these categories of swaps, there will be an analogous swap clearing requirement in at least one non-U.S. jurisdiction that is in effect at the time the Commission's mandate would take effect. For the other categories of swaps, effective dates have been proposed in some but not all cases, and the proposed effective dates could change. In addition, it is likely to be a few months before the Commission could finalize a rule. Thus, for each other category, it is possible that a Commission rule could take effect before or after the effective date in the specified jurisdiction. The Commission currently expects that if it finalizes this rule later this year, the effective date for the expanded termination date range for the OIS swaps denominated in EUR, GBP, and USD, would probably coincide with or lag behind the European Union's implementation by a short time period. By contrast, the effective date for a Commission clearing requirement for the fixed-to-floating swaps denominated in CAD, HKD-, NOK, PLN, SEK, SGD, and CHF, as well as the FRA denominated in NOK-, PLN, and SEK, and the CAD-denominated OIS, could precede the effective date of the analogous clearing requirement in the relevant non-U.S. jurisdiction.

The primary benefit of implementing the clearing requirement for all products subject to this proposal on a single date is that it provides market participants with certainty and makes it easier for industry members to update relevant policies and procedures at one time.

#### *B. Implementation Scenario II—Alternative Compliance Dates To Coordinate Implementation With Non-U.S. Jurisdictions*

Second, the Commission is considering proposing a compliance date for the clearing requirement that will take place on the earlier of (i) the date 60 days after the effective date of an analogous clearing requirement that has been adopted by a regulator in a non-U.S. jurisdiction, provided that any such date for any swap covered by the final rule shall not be earlier than the date which is 60 days after the Commission's final rule is published, or (ii) the date two years after the Commission's final rule is published in the **Federal Register**. Under this scenario, compliance with the

Commission's clearing requirement will be required for certain interest rate swaps products as non-U.S. jurisdictions make analogous clearing requirements effective, but in all cases compliance with the Commission's clearing requirements will be required no later than two years after the final rule is published.

This implementation scenario blends flexibility with certainty by giving market participants the opportunity to implement clearing for these interest rate swap products over time, while providing a date certain by which market participants will be expected to clear all products subject to this proposal.

The Commission notes that under this scenario, the compliance date for the (i) AUD-denominated fixed-to-floating, basis, FRA, and OIS swaps, and (ii) MXN-denominated fixed-to-floating swaps, would be 60 days after the publication of the final rule in the **Federal Register** because the clearing requirements for these swaps products are effective in non-U.S. jurisdictions currently. Market participants subject to the Commission's jurisdiction would not be required to comply with the swap clearing requirements for the expanded termination dates for the OIS swaps denominated in EUR, GBP, and USD, until 60 days after the later of (i) June 21, 2016 (or such later date when the European Union's clearing requirement for these products first becomes effective) or (ii) the publication date of the final rule in the **Federal Register**, but in no event would the compliance date be later than two years after publication of the final rule in the **Federal Register**.

In order to manage expectations for implementation under the second scenario, the Commission proposes to wait no longer than two years after the final rule is adopted to require clearing for all of the swaps products subject to this proposal.

#### *Request for Comment*

The Commission requests comment on not using regulation 50.25 to phase in compliance with the proposed clearing requirement. In addition, the Commission requests comment on the two proposed implementation scenarios, the advantages and disadvantages of each of the options discussed above and whether market participants have a preference for one over the other. In particular, the Commission is seeking feedback on whether all proposed clearing requirements should become effective at the same time or whether the compliance date for a clearing

requirement should be related to the date that an analogous clearing requirement becomes effective in a non-U.S. jurisdiction.

#### **V. Cost Benefit Considerations**

##### *A. Statutory and Regulatory Background*

Proposed revised regulation 50.4(a) identifies certain swaps that would be required to be cleared under section 2(h)(1)(A) of the CEA in addition to those currently required to be cleared by existing regulations 50.2 and 50.4(a). The clearing requirement proposed herein is designed to standardize and reduce counterparty risk associated with swaps, and in turn, mitigate the potential systemic impact of such risks and reduce the likelihood for swaps to cause or exacerbate instability in the financial system. The Commission believes this proposal is consistent with one of the fundamental premises of the Dodd-Frank Act and the 2009 commitments by G20 nations: The use of central clearing can reduce systemic risk.

Regulation 39.5 provides an outline for the Commission's review of swaps for required clearing. Regulation 39.5 allows the Commission to review swaps submitted by DCOs. Under section 2(h)(2)(D) of the CEA, in reviewing swaps for a clearing requirement determination, the Commission must take into account the following factors: (1) Significant outstanding notional exposures, trading liquidity and adequate pricing data; (2) the availability of rule framework, capacity, operational expertise 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; (3) the effect on the mitigation of systemic risk; (4) the effect on competition; and (5) the existence of reasonable legal certainty in the event of the insolvency of the DCO or one or more of its clearing members.<sup>112</sup> Regulation 39.5 also directs DCOs to provide to the Commission other information, such as product specifications, participant eligibility standards, pricing sources, risk management procedures, a description of the manner in which the DCO has provided notice of the submission to its members and any additional information requested by the Commission.<sup>113</sup> This information is designed to assist the Commission in identifying those swaps that are required to be cleared.

<sup>112</sup> Section 2(h)(2)(D) of the CEA.

<sup>113</sup> Regulation 39.5(b)(3)(ii).



The following discussion is a consideration of the costs and benefits of the Commission's proposed actions pursuant to the regulatory requirements above.

### B. Overview of Swap Clearing

#### i. How Clearing Reduces Risk

When a bilateral swap is cleared, the DCO becomes the counterparty to each original participant to the swap. This arrangement mitigates counterparty risk to the extent that the clearinghouse may be a more creditworthy counterparty than the original swap participants. Central clearing reduces the interconnectedness of the swap positions of SDs, and other swap market participants, because the DCO, an independent third party that takes no market risk, guarantees the collateralization of swap counterparties' exposures. DCOs have demonstrated resilience in the face of past market stress. DCOs remained financially sound and effectively settled positions in the midst of turbulent financial conditions in 2007–2008 that threatened the financial health and stability of many other types of entities.

The Commission believes that DCOs will continue to be some of the most creditworthy counterparties in the swap markets because DCOs have various tools available that are effective in monitoring and managing counterparty risk. These tools include the contractual right to: (1) Collect initial and variation margin associated with outstanding swap positions; (2) mark positions to market regularly, usually multiple times per day, and issue margin calls whenever the margin in a customer's account has dropped below predetermined levels set by the DCO; (3) adjust the amount of margin that is required to be held against swap positions in light of changing market circumstances, such as increased volatility in the underlying product; and (4) close out the swap positions of a customer that does not meet margin calls within a specified period of time.

Moreover, in the event that a clearing member defaults on its obligations to the DCO, the DCO has numerous remedies available to manage risk, including transferring the swap positions of the defaulted member to another clearing member, and covering any losses that may have accrued with the defaulting member's margin on deposit. In order to transfer the swap positions of a defaulting member and manage the risk of those positions, the DCO has the ability to take a number of steps, including: (1) Hedge the portfolio of positions of the defaulting member to

limit future losses; (2) partition the portfolio into smaller pieces; and (3) auction off the pieces of the portfolio, together with their corresponding hedges, to other members of the DCO. In order to cover the losses associated with such a default, the DCO would typically draw from: (1) The initial margin posted by the defaulting member; (2) the guaranty fund contribution of the defaulting member; (3) the DCO's own capital contribution; (4) the guaranty fund contributions of non-defaulting members; and (5) an assessment on the non-defaulting members. These mutualized risk mitigation capabilities are largely unique to clearinghouses and help to ensure that they remain solvent and creditworthy swap counterparties even when clearing members default or there are stressed market circumstances.

#### ii. The Clearing Requirement and Role of the Commission

With the passage of the Dodd-Frank Act, Congress gave the Commission the responsibility for determining which swaps would be required to be cleared pursuant to section 2(h)(1)(A) of the CEA. Therefore, the costs and benefits associated with a clearing requirement are attributable to both the CEA, as amended by the Dodd-Frank Act, and the Commission acting in accordance with the CEA. As a result, it is difficult to distinguish between the costs associated with the Dodd-Frank Act itself, and the costs associated with the Commission exercising the authority granted to it by the Dodd-Frank Act.

There also is evidence that the interest rate swaps market has been migrating into clearing for multiple years in response to market incentives, in anticipation of the Dodd-Frank Act's clearing requirement, and as a result of the First Clearing Requirement Determination. This shift can be seen in the volumes of interest rate swaps currently being cleared by CME and LCH, the two DCOs that submitted a significant portion of the information contained in this proposal. The open notional value of interest rate swaps cleared at CME has increased from approximately \$2.2 trillion to over \$5.5 trillion between June 10, 2013 and September 10, 2013, two implementation dates for the First Clearing Requirement Determination.<sup>114</sup> Because the volume of interest rate swaps being cleared also has increased

voluntarily, it is impossible to precisely determine the extent to which any increased use of clearing would result from statutory or regulatory requirements, as compared to the desire of swap market participants to clear swaps for the risk-mitigating benefits.<sup>115</sup>

For these reasons, the Commission has determined that the costs and benefits related to the required clearing of the interest rate swaps subject to this proposal are attributable, in part to (1) Congress's stated goal of reducing systemic risk by, among other things, requiring clearing of swaps and (2) the Commission's exercise of its discretion in selecting swaps or classes of swaps to achieve those ends. The Commission will discuss the costs and benefits of the overall move from voluntary clearing to required clearing for the swaps subject to this proposal below.

#### Request for Comment

The Commission requests comment concerning its assumption that a shift towards clearing may be due to the Dodd-Frank Act's general clearing requirement or other motivations including independent business reasons and incentives from other regulators, such as prudential authorities.

### C. Consideration of the Costs and Benefits of the Commission's Action

#### i. CEA Section 15(a)

Section 15(a) of the CEA requires the Commission to consider the costs and benefits of its actions before promulgating a regulation under the CEA or issuing certain orders. Section 15(a) further specifies that the costs and benefits shall be evaluated in light of the following five broad areas of market and public concern: (1) Protection of market participants and the public; (2) efficiency, competitiveness and financial integrity; (3) price discovery; (4) sound risk management practices; and (5) other public interest considerations (collectively referred to herein as the Section 15(a) Factors.) Accordingly, the Commission considers the costs and benefits associated with the proposed clearing requirement determination in light of the Section 15(a) Factors.

In the sections that follow, the Commission considers: (1) The costs and benefits of required clearing for the swaps identified in this proposed rule; (2) the alternatives contemplated by the

<sup>114</sup> See CME comment letter of Sept. 16, 2013 in response to the Commission's notice of proposed rulemaking concerning DCOs and International Standards, 78 FR 50260, Aug. 16, 2013. The CME comment letter is available on the Commission's web site at: <http://comments.cftc.gov/PublicComments/CommentList.aspx?id=1391>.

<sup>115</sup> It is also possible that some market participants would respond to the proposed rule's requirement that certain interest rate swaps be cleared by decreasing their use of such swaps. This possibility contributes to the uncertainty regarding how the proposed rule will affect the quantity of swaps that are cleared.



Commission and their costs and benefits; (3) the impact of required clearing for the proposed swaps on the Section 15(a) Factors.

ii. Costs and Benefits of Required Clearing Under the Proposed Clearing Requirement Determination

Market participants may incur certain costs in order to clear the interest rate swaps included in the proposed rule. For example, market participants that are not already clearing interest rate swaps either voluntarily or pursuant to the First Clearing Requirement Determination may incur certain startup and ongoing costs related to developing technology and infrastructure, updating or creating new legal agreements, service provider fees, and collateralization of the cleared positions. The per-entity costs described above are likely to vary widely depending on the needs of each market participant. Such costs likely will be lower for the market participants who have used the interest rate swaps covered by this proposal in the past and who currently execute and clear the interest rate swaps covered by the First Clearing Requirement Determination. The opposite likely would be true for market participants that start clearing because of the proposed clearing requirement. The costs of collateralization, on the other hand, are likely to vary depending on whether or not an entity is subject to the margin requirements for uncleared swaps,<sup>116</sup> whether or not an entity is subject to capital requirements, and the differential between the cost of capital for the assets they use as collateral, and the returns realized on those assets.

Market participants that would begin clearing the interest rate swaps subject to this proposal also would obtain the benefits associated with clearing. These benefits include reduced and standardized counterparty risk, increased transparency, and easier access to the swap markets. Together, these benefits will contribute significantly to the stability and efficiency of the financial system. However, these benefits are difficult to quantify with any degree of precision, and market participants already clearing these swaps already realize the benefits of clearing.

Request for Comment

The Commission requests comment concerning the costs of clearing described above for various market

<sup>116</sup> The Commission's margin requirements for uncleared swaps are codified in subpart E of part 23 of the Commission's regulations.

participants. The Commission requests comment from both U.S. and non-U.S. swap counterparties that may be affected by the proposed determination.<sup>117</sup> The Commission also requests comment as to the benefits that market participants could realize as a result of the proposed rule.

a. Technology, Infrastructure, and Legal Costs

Market participants already clearing their swaps may incur costs in making necessary changes to technology systems to support the clearing required by the proposed rule. Market participants that are not currently clearing swaps may incur costs if they need to implement middleware technology to connect to FCMs that will clear their transactions. Similarly, legal costs will vary depending on the extent to which a market participant is already clearing swaps. The Commission does not have the information necessary to determine either the costs associated with entities that need to establish relationships with one or more FCMs or the costs associated with entities that already have relationships with one or more FCMs but need to revise their agreements.<sup>118</sup> The costs are likely to depend on the specific business needs of each entity and would therefore vary widely among market participants. As a general matter, the Commission would expect that most market participants already will have undertaken the steps necessary to accommodate the clearing of required swaps, and that the burden associated with these additional interest rate swap products should be minimal.

Request for Comment

The Commission requests comment, including any quantifiable data and analysis, on the changes that market participants will have to make to their technological and legal infrastructures

<sup>117</sup> See section II.B.iii.a.1 discussing how the Commission has considered the swap clearing requirement to apply in a cross-border context.

<sup>118</sup> The Commission does not have current information regarding such fees; commenters are requested to provide the necessary data where available. In the First Clearing Requirement Determination (77 FR 74284 at 74324), the Commission noted that it had been estimated that it would cost smaller financial institutions between \$2,500 and \$25,000 to review and negotiate legal agreements to establish a new business relationship with an FCM (citing comment letters from Chatham Financial and Webster Bank submitted to the Commission in 2012 in response to the Commission's request for comment concerning the cost benefit analysis regarding a potential clearing exception for certain small financial institutions under the end-user exception, available at: <http://comments.cftc.gov/PublicComments/ViewComment.aspx?id=58077> and <http://comments.cftc.gov/PublicComments/ViewComment.aspx?id=58076>).

in order to clear the interest rate swaps that are subject to the proposed clearing requirement. In particular, the Commission requests comment concerning the following questions: How many market participants may have to establish new relationships with FCMs, or significantly upgrade those relationships based on the inclusion of these additional products to the clearing requirement?

b. Ongoing Costs Related to FCMs and Other Service Providers

In addition to costs associated with technological and legal infrastructures, market participants transacting in swaps subject to the proposed clearing requirement will face ongoing costs associated with fees charged by FCMs. DCOs typically charge FCMs an initial transaction fee for each cleared interest rate swap its customers enter, as well as an annual maintenance fee for each open position. In addition, the Commission understands that customers that occasionally transact in swaps are typically required to pay a monthly or annual fee to each FCM.<sup>119</sup>

As discussed above, it is difficult to predict precisely how the proposed requirement to clear the additional swaps covered by this proposed rule will increase the use of swap clearing, as compared to the use of clearing that would occur in the absence of the requirement. The Commission expects that the proposed clearing requirement generally would increase the use of clearing, leading in most cases to an incremental increase in the transaction costs noted above. However, the Commission would expect that most market participants already will have undertaken the steps necessary to accommodate the clearing of required swaps, and that the burden associated with the additional interest rate swap products should be minimal.

Request for Comment

The Commission requests additional comment, data, and analysis regarding the fee structures of FCMs in general, and in particular as they relate to the clearing of the types of swaps covered by the proposed rule.

<sup>119</sup> The Commission does not have current information regarding such fees; commenters are requested to provide the necessary data where available. In the First Clearing Requirement Determination (77 FR 74284 at 74325), the Commission noted that customers that occasionally transact in swaps are typically required to pay a monthly or annual fee to each FCM that ranges from \$75,000 to \$125,000 per year (citing comment letters from Chatham Financial and Webster Bank).

c. Costs Related to Collateralization of Cleared Swap Positions

Market participants that enter into the interest rate swaps subject to the proposed rule will be required to post initial margin at a DCO. The Commission understands that some of the swaps subject to this proposal are currently being cleared on a voluntary basis. Specifically, the Commission estimates the following.

TABLE 17—PART 45 DATA ESTIMATED PERCENTAGES OF THE INTEREST RATE SWAP MARKET CLEARED VOLUNTARILY SECOND QUARTER 2015<sup>120</sup>—Continued

Product	Percentage of market cleared
AUD-denominated fixed-to-floating interest rate swap	65
CAD-denominated fixed-to-floating interest rate swap	72
CHF-denominated fixed-to-floating interest rate swap	83
HKD-denominated fixed-to-floating interest rate swap	49

TABLE 17—PART 45 DATA ESTIMATED PERCENTAGES OF THE INTEREST RATE SWAP MARKET CLEARED VOLUNTARILY SECOND QUARTER 2015<sup>120</sup>—Continued

Product	Percentage of market cleared
MXN-denominated fixed-to-floating interest rate swap	25
NOK-denominated fixed-to-floating interest rate swap	40
PLN-denominated fixed-to-floating interest rate swap	66
SEK-denominated fixed-to-floating interest rate swap	45
SGD-denominated fixed-to-floating interest rate swap	24
AUD-denominated basis swap	28
AUD-denominated FRA	0
NOK-denominated FRA	94
PLN-denominated FRA	32
SEK-denominated FRA	25
EUR-denominated OIS (2–3 year term)	100
GBP-denominated OIS (2–3 year term)	100

TABLE 17—PART 45 DATA ESTIMATED PERCENTAGES OF THE INTEREST RATE SWAP MARKET CLEARED VOLUNTARILY SECOND QUARTER 2015<sup>120</sup>—Continued

Product	Percentage of market cleared
USD-denominated OIS (2–3 year term)	100
AUD-denominated OIS	18
CAD-denominated OIS	88

With information provided by CME, LCH, and SGX, the Commission has estimated the amounts of initial margin currently on deposit at these three DCOs with respect to the swaps that are the subject of this proposed determination. Using this information, the Commission estimates that this clearing requirement determination would require market participants to post the following amounts of additional initial margin for each of the interest rate swaps covered by this proposed determination.<sup>121</sup>

TABLE 18—ESTIMATED ADDITIONAL AMOUNTS OF INITIAL MARGIN DUE TO PROPOSED CLEARING REQUIREMENT

Swap	Amount of margin USD equivalent
AUD-denominated Fixed-to-floating interest rate swap	\$1,107,287,108
CAD-denominated Fixed-to-floating interest rate swap	419,208,078
CHF-denominated Fixed-to-floating interest rate swap	105,963,972
HKD-denominated Fixed-to-floating interest rate swap	216,677,823
MXN-denominated Fixed-to-floating interest rate swap	1,867,370,001
NOK-denominated Fixed-to-floating interest rate swap	241,288,835
PLN-denominated Fixed-to-floating interest rate swap	84,789,768
SEK-denominated Fixed-to-floating interest rate swap	603,185,677
SGD-denominated Fixed-to-floating interest rate swap	1,113,041,264
AUD-denominated basis swap	612,166,597
AUD-denominated FRA	<sup>122</sup> N/A
NOK-denominated FRA	10,746,747
PLN-denominated FRA	186,238,075
SEK-denominated FRA	942,845,508
EUR-denominated OIS with terms of 2–3 years	0
GBP-denominated OIS with terms of 2–3 years	0
USD-denominated OIS with terms of 2–3 years	0
AUD-denominated OIS	84,254,007
CAD-denominated OIS	6,630,342
<b>Total</b>	<b>7,601,693,801</b>

The Commission believes that these estimates may be higher than the actual amounts of initial margin that would need to be posted as a result of this

proposed rule because these estimates are based on several assumptions. First, the estimates assume that none of the swaps that are currently executed on an uncleared basis are currently

collateralized. By contrast, an ISDA survey reported that as of December 31, 2014, 88.9% of all uncleared fixed income derivative transactions are subject to a credit support annex.<sup>123</sup>

<sup>120</sup> The Commission used part 45 data to make these estimates based on swap activity occurring during the second quarter of 2015. The data set does not include swaps entered into by affiliated counterparties. Data from the third and fourth quarters of 2015 were used to calculate the estimates for EUR-, GBP-, and USD-denominated OIS with terms of two to three years. Data from

January 2016 was used to calculate the estimates for AUD- and CAD-denominated OIS.

<sup>121</sup> The Commission made these calculations using the following formula:

$$X/Y - X.$$

X = Current value of margin on deposit at DCOs for an interest rate swap denominated in a particular currency.

Y = Percentage of the market for that swap that is currently cleared.

<sup>122</sup> The amount of additional margin required for AUD-denominated FRAs cannot currently be estimated.

<sup>123</sup> See ISDA Margin Survey 2015 at page 12, Table 6, available at: <http://www2.isda.org/functional-areas/research/surveys/margin-surveys/>.

Moreover, uncleared swaps between certain SDs, MSPs, and “financial end-users,” will be subject to initial and variation margin requirements pursuant to the Commission’s margin regulations for uncleared swaps, as discussed further below.<sup>124</sup> Second, the estimates listed in Table 18 are based on the assumption that none of the swaps, when entered into on an uncleared basis, are priced to include implicit contingent liabilities and counterparty risk borne by the counterparty to the swap. Third, not all swaps having the additional denominations or maturities proposed herein will necessarily be eligible for clearing if they are not otherwise covered by the clearing requirement (*i.e.*, the specifications set forth in proposed revised regulation 50.4(a)) or if the swaps have terms which prevent them from being cleared. Finally, certain entities may elect an exception or exemption from the clearing requirement, which would not require such an entity to clear the swaps covered by this proposal.<sup>125</sup>

The amounts of initial margin that the Commission estimates would be required to be posted due to this proposed rule (listed in Table 18) do not include the costs that some market participants may incur to obtain this collateral. Some entities may have to raise funds to acquire assets that a DCO accepts as initial margin. The greater the funding cost relative to the rate of return on the asset used as initial margin, the greater the cost of procuring this asset. Quantifying this cost with any precision is challenging because different entities may have different funding costs and may choose assets with different rates of return. One way to estimate the funding cost of procuring assets to be used as initial margin is to compare the rate of return, or yield, on an asset that is usually accepted by a DCO for initial margin with the cost of funding the asset with debt financing. Based on the Commission’s experience and understanding, the Commission has

Although it is unclear exactly how many of the derivatives covered by this survey are swaps, it is reasonable to assume that a large part of them are.

<sup>124</sup> Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants; Final Rule, 81 FR 636 (Jan. 6, 2016) (hereinafter “uncleared swap margin regulations”). The U.S. prudential regulators finalized similar regulations in Oct. 2015.

<sup>125</sup> See subpart C of part 50 (Exceptions and Exemptions to the Clearing Requirement). There also is a possibility that the estimates listed in Table 18 are lower than the actual figures because certain market participants with directional portfolios may be unable to benefit from margin offsets that could come from clearing. However, the Commission believes that the estimates listed in Table 18 are more likely to overstate the required additional margin amounts than to underestimate them.

decided to estimate this cost using an average borrowing cost of 4.4%<sup>126</sup> and then subtracting the 1.8% return that a 5-year U.S. Treasury bond yields.<sup>127</sup> This calculation produces an estimated funding cost of 2.6%. By multiplying the total estimated initial margin amount of \$7,601,693,801 (Table 18) by 2.6%, the Commission estimates that the cost of funding the total initial margin that would be required to be posted due to this proposed rule is approximately \$197,644,039. It also should be noted that some entities, such as pension funds and asset managers, may use as initial margin assets that they already own. In these cases, the market participants would not incur a funding cost in order to post initial margin.

The Commission requests comments on all aspects of quantifying the cost of funding initial margin that would be required to be posted pursuant to this proposed rule. In particular, the Commission requests comment on funding costs that market participants may face due to interest rates on bonds issued by a sovereign nation that also issues the currency in which a swap subject to this proposed determination is denominated. The Commission recognizes that CME and LCH accept as initial margin bonds issued by several sovereigns and that market participants may post such bonds as initial margin if the Commission adopted this proposed rule.

The Commission recognizes further that the new initial margin amounts that would be required to be posted as a result of this proposed clearing requirement will, for entities required to post initial margin under both the clearing requirement and the uncleared swap margin regulations, replace the initial margin amount that will be required pursuant to the uncleared swap margin regulations. The uncleared swap margin regulations require SDs, MSPs, and certain “financial end-users” to post and collect initial and variation margin for uncleared swaps, subject to various conditions and limitations.<sup>128</sup> The Commission expects that the initial margin that would be required to be

<sup>126</sup> Bank of America Merrill Lynch U.S. Corporate BBB effective yield for December 2015.

<sup>127</sup> In December 2015, a 5-year U.S. treasury bond yielded 1.8%.

<sup>128</sup> See subpart E of part 23 of the Commission’s regulations. Swap clearing requirements under part 50 of the Commission’s regulations apply to a broader scope of market participants than the uncleared swap margin regulations. For example, under subpart E of part 23, a financial end-user that does not have “material swaps exposure” (as defined by regulation 23.151) is not required to post initial margin, but such an entity may be subject to the swap clearing requirement.

posted for a cleared swap subject to this proposed determination would typically be less than the initial margin that would be required to be posted for uncleared swaps pursuant to the uncleared swap margin regulations. Whereas the initial margin requirement for cleared swaps must be established according to a margin period of risk of at least five days,<sup>129</sup> under the uncleared swap margin regulations, the minimum initial margin requirement is set with a margin period of risk of 10-days or, under certain circumstances, less or no initial margin for inter-affiliate transactions.<sup>130</sup> The uncleared swap margin regulations will be phased in between September 1, 2016 and September 1, 2020.

With respect to swaps that would be subject to this proposed clearing requirement determination, but not subject to the uncleared swap margin regulations, the Commission believes that the new initial margin amounts that would be deposited would be a displacement of a cost that is currently embedded in the prices and fees for transacting the swaps on an uncleared and uncollateralized basis rather than a new cost. Entering into a swap is costly for any market participant because of the default risk posed by its counterparty, whether the counterparty is a DCO, SD, MSP, or other market participant. When a market participant faces the DCO, the DCO accounts for that counterparty credit risk by requiring collateral to be posted, and the cost of capital for the collateral is part of the cost that is necessary to maintain the swap position. When a market participant faces an SD or other counterparty in an uncleared swap, however, the uncleared swap contains an implicit line of credit upon which the market participant effectively draws when its swap position is out of the money. Counterparties charge for this implicit line of credit in the spread they offer on uncollateralized, uncleared swaps. It has been argued that the cash flows of an uncollateralized swap (*i.e.*, a swap with an implicit line of credit) are, over time, substantially equivalent to the cash flows of a collateralized swap with an explicit line of credit.<sup>131</sup> And because the counterparty credit risk created by the implicit line of credit

<sup>129</sup> Commission regulation 39.13(g)(2)(ii)(C).

<sup>130</sup> Commission regulations 23.154(b)(2)(i) and 23.159. See also Margin and Capital Requirements for Covered Swap Entities, 80 FR 77840 (Nov. 30, 2015).

<sup>131</sup> See Antonio S. Mello and John E. Parsons, “Margins, Liquidity, and the Cost of Hedging,” MIT Center for Energy and Environmental Policy Research, May 2012, available at: <http://dspace.mit.edu/bitstream/handle/1721.1/70896/2012-005.pdf;sequence=1>.

is the same as the counterparty risk that would result from an explicit line of credit provided to the same market participant, to a first order approximation, the charge for each should be the same as well.<sup>132</sup> This means that the cost of capital for additional collateral posted as a consequence of requiring uncollateralized swaps to be cleared takes a cost that is implicit in an uncleared, uncollateralized swap and makes it explicit. This observation applies to capital costs associated with both initial margin and variation margin.

In addition, the proposed rule may result in added operational costs. With uncleared swaps, counterparties may agree not to collect variation margin until certain thresholds of exposure are reached, thus reducing or entirely eliminating the need to exchange variation margin as exposure changes. DCOs, on the other hand, collect and pay variation margin on a daily basis and sometimes more frequently. As a consequence, increased required clearing may increase certain operational costs associated with exchanging variation margin with the DCO (although the exchange of variation margin may be expected to provide the benefit of lowering the build-up of current exposure). On the other hand, increased clearing also could lead to reduced operational costs related to valuation disputes about posted collateral, as parties to cleared swaps agree to post collateral that is less susceptible to valuation disputes.

The proposed rule also may result in additional costs for clearing members in the form of guaranty fund contributions. However, it also could decrease guaranty fund contributions for certain clearing members. Once the proposed clearing requirement takes effect, market participants that currently transact swaps bilaterally must either become clearing members of a DCO or submit such swaps for clearing through an existing clearing member. A market participant that becomes a direct clearing member must make a guaranty fund contribution, while a market participant that clears its swaps through a clearing member may pay higher fees

if the clearing member passes the costs of the guaranty fund contribution to its customers. While the addition of new clearing members and new customers for existing clearing members may result in an increase in guaranty fund requirements, it should be noted that if (1) new clearing members are not among the two clearing members used to calculate the guaranty fund and (2) any new customers trading through a clearing member do not increase the size of uncollateralized risks at either of the two clearing members used to calculate the guaranty fund, all else held constant, existing clearing members may experience a decrease in their guaranty fund requirement.

#### Request for Comment

The Commission invites further comment regarding the total amount of additional collateral that would be posted due to required clearing of the interest rate swaps covered by this proposed clearing requirement determination. Furthermore, the Commission invites comment regarding the cost of capital and returns on capital for that collateral. The Commission also invites comment on the effects of required clearing on the capital requirements for financial institutions. Finally, the Commission invites comment regarding the costs and benefits associated with operational differences related to the collateralization of uncleared versus cleared swaps. Please supply quantifiable data and analysis regarding these subjects, if possible.

#### d. Benefits of Clearing

As noted above, the benefits of swap clearing are generally significant. The Commission believes that while the requirement to margin uncleared swaps in certain circumstances will also mitigate counterparty credit risk, such risk is mitigated further for swaps that are cleared through a central counterparty. Moreover, as discussed above, the proposed clearing determination would apply to a larger set of market participants than the uncleared swaps margin requirements. Thus, to the extent that the proposed clearing requirement for additional interest rate swaps leads to increased clearing, these benefits are likely to result. As is the case for the costs noted above, it is impossible to predict the precise extent to which the use of clearing will increase as a result of the proposed rule, and therefore the benefits of the proposed rule cannot be precisely quantified. However, the Commission believes that the benefits of increased clearing resulting from the proposed

rule will be substantial, because the additional swaps required to be cleared by the proposed rule have significant volumes within the overall interest rate swap market.

The proposed rule's requirement that certain swaps be cleared is expected to increase the number of swaps in which market participants will face a DCO, and therefore, will face a highly creditworthy counterparty. As discussed above, DCOs are some of the most creditworthy counterparties in the swap market because of the risk management tools they have available.

#### Request for Comment

The Commission requests comment on whether benefits will result from the proposed rule, and, if so, the expected magnitude of such benefits.

Also, would the proposed rule provide benefits by furthering international harmonization of clearing requirements? As noted above, if a non-U.S. jurisdiction were to proceed with a swap clearing requirement determination for an interest rate swap denominated in a particular currency, and the Commission's clearing requirement did not cover that swap, the market participants might be able to avoid the non-U.S. jurisdiction's requirement by entering into the swap in the U.S.<sup>133</sup>

#### D. Costs and Benefits of the Proposed Rule as Compared to Alternatives

The proposed rule is a function of both the market importance of these products and the fact that they already are widely cleared. The Commission believes these interest rate swaps are appropriate to require to be cleared because they are widely used and already have a blueprint for clearing and risk management.

Given the implementation of the Commission's First Clearing Requirement Determination for interest rate swaps, and the widespread use of clearing for the additional products included in this proposal, DCOs, FCMs, and market participants already have experience clearing the types of swaps proposed for required clearing. The Commission therefore expects that DCOs and FCMs are prepared to handle the increases in volumes and outstanding notional amounts in these swaps that are likely to result from the proposed rule. Because of the wide use of these swaps and their importance to the market, and because these swaps are already successfully being cleared, the Commission is proposing to subject

<sup>132</sup> See *id.*, Mello and Parsons state in their paper: "[h]edging is costly. But the real source of the cost is not the margin posted, but the underlying credit risk that motivates counterparties to demand that margin be posted." *Id.* at 12. They go on to demonstrate that, "[t]o a first approximation, the cost charged for the non-margined swap must be equal to the cost of funding the margin account. This follows from the fact that the non-margined swap just includes funding of the margin account as an embedded feature of the package." *Id.* at 15–16.

<sup>133</sup> See section I.B. discussing clearing requirements in non-U.S. jurisdictions.

certain additional interest rate swaps to the clearing requirement.

The Commission is considering two alternative implementation scenarios. First, the Commission is considering a scenario under which the clearing requirement for all products subject to this proposal would take effect at the same time, regardless of whether an analogous clearing requirement has been promulgated by an authority of a non-U.S. jurisdiction. Implementing the clearing requirement for all products subject to this proposal on a single date would give market participants certainty and make it easier for industry members to update relevant policies and procedures at one time.

Second, the Commission is considering a scenario under which compliance with the clearing requirement will be required upon the earlier of (i) the date 60 days after the effective date of an analogous clearing requirement that has been adopted by a regulator in a non-U.S. jurisdiction, provided that any such date for any swap covered by the final rule shall not be earlier than the date which is 60 days after the Commission's final rule is published, or (ii) the date two years after the Commission's final rule is published in the **Federal Register**. This scenario would allow the Commission to coordinate compliance dates with the effective dates set by non-U.S. jurisdictions in order to promote international harmonization of clearing requirements while maintaining certainty that compliance with all proposed clearing requirements will be required within a specific time period (*i.e.*, all products subject to this proposal will be subject to a clearing requirement no later than two years after the final rule is published).

#### Request for Comment

The Commission requests comment on the costs and benefits of adding nine currencies to the fixed-to-floating interest rate swap class, adding AUD-denominated basis swaps to the basis swap class, adding AUD-, NOK-, PLN-, SEK-denominated FRA swaps to the FRA class, extending the termination date range for the USD, GBP, and EUR-OIS covered by the OIS class, and adding AUD- and CAD-denominated OIS to the OIS class. In addition, the Commission requests comment regarding the costs and benefits of the two alternative proposals for the finalization and implementation of the clearing requirements. The Commission requests that, if possible, commenters quantify costs and benefits that may result either from the approach proposed by the Commission or from

alternatives that commenters believe the Commission should consider.

#### E. Section 15(a) Factors

As noted above, the requirement to clear the fixed-to-floating interest rate swaps, basis swaps, FRAs, and OIS covered by this proposed rule is expected to result in increased use of clearing, although it is impossible to quantify with certainty the extent of that increase. Thus, this section discusses the expected results from an overall increase in the use of swap clearing in terms of the factors set forth in section 15(a) of the CEA.

##### i. Protection of Market Participants and the Public

As described above, required clearing of the interest rate swaps identified in this proposed rule is expected to most likely reduce counterparty risk for market participants that clear those swaps because they will face the DCO rather than another market participant that lacks the full array of risk management tools that the DCO has at its disposal. This also reduces uncertainty in times of market stress because market participants facing a DCO are less concerned with the impact of such stress on the solvency of their counterparty for cleared trades.

By proposing to require clearing of certain interest rate swaps, all of which are already available for clearing, the Commission expects to encourage a smooth transition by creating an opportunity for market participants to work out challenges related to required clearing of swaps while operating in familiar terrain. More specifically, the DCOs currently clearing these interest rate swaps, CME, Eurex, LCH, and SGX will clear an increased volume of swaps that they already understand and have experience managing. Similarly, FCMs likely will realize increased customer and transaction volume as the result of the requirement, but will not have to simultaneously learn how to operationalize clearing for the covered interest rate swaps. The experience of FCMs with these products also is likely to benefit customers that are new to clearing, as the FCM guides them through initial experiences with cleared swaps.

In addition, uncleared swaps subject to collateral agreements can be the subject of valuation disputes. These valuation disputes sometimes require several months or longer to resolve. Potential future exposures can grow significantly and even beyond the amount of initial margin posted during that time, leaving one of the two counterparties exposed to counterparty

credit risk. DCOs virtually eliminate valuation disputes for cleared swaps, as well as the risk that uncollateralized exposure can develop and accumulate during the time when such a dispute would have otherwise occurred, thus providing additional protection to market participants who transact in swaps that are required to be cleared.

As far as costs are concerned, market participants that do not currently have established clearing relationships with an FCM will have to set up and maintain such a relationship in order to clear swaps that are required to be cleared. As discussed above, market participants that conduct a limited number of swaps per year likely will be required to pay monthly or annual fees that FCMs charge to maintain both the relationship and outstanding swap positions belonging to the customer. In addition, the FCM is likely to pass along fees charged by the DCO for establishing and maintaining open positions.

It is expected that most market participants already will have had experience complying with prior clearing requirements and that the incremental burdens associated with clearing these additional products should be minimal, especially given the similarities that these products have to those already included within the prior clearing determination and the fact that they are already widely cleared products.

##### ii. Efficiency, Competitiveness, and Financial Integrity of Swap Markets

Swap clearing, in general, is expected to reduce uncertainty regarding counterparty risk in times of market stress and promote liquidity and efficiency during those times. Increased liquidity promotes the ability of market participants to limit losses by exiting positions effectively and efficiently when necessary in order to manage risk during a time of market stress.

In addition, to the extent that positions move from facing multiple counterparties in the bilateral market to being cleared through a smaller number of clearinghouses, clearing facilitates increased netting. This reduces the amount of collateral that that a party must post in margin accounts.

As discussed above, in setting forth this proposed clearing requirement determination, the Commission took into account a number of specific factors that relate to the financial integrity of the swap markets. Specifically, the discussion above includes an assessment of whether CME, Eurex, LCH, and SGX, each of which currently clear interest rate swaps, have the rule framework, capacity, operational

expertise and resources, and credit support infrastructure to clear these swaps on terms that are consistent with the material terms and trading conventions on which the contract is then traded. This proposed clearing requirement determination also considered the resources of DCOs to handle additional clearing during stressed and non-stressed market conditions, as well as the existence of reasonable legal certainty in the event of a clearing member or DCO insolvency.<sup>134</sup>

As discussed above, bilateral swaps create counterparty risk that may lead market participants to discriminate among potential counterparties based on their creditworthiness. Such discrimination is expensive and time consuming insofar as market participants must conduct due diligence in order to evaluate a potential counterparty's creditworthiness. Requiring certain types of swaps to be cleared reduces the number of transactions for which such due diligence is necessary, thereby contributing to the efficiency of the swap markets.

In proposing a clearing requirement for interest rate swaps, the Commission must consider the effect on competition, including appropriate fees and charges applied to clearing. As discussed in more detail in section II.B.iii.d, there are a number of potential outcomes that may result from required clearing. Some of these outcomes may impose costs, such as if a DCO possessed market power and exercised that power in an anticompetitive manner, and some of the outcomes would be positive, such as if the clearing requirement facilitated a stronger entry opportunity for competitors.

### iii. Price Discovery

Clearing, in general, encourages better price discovery because it eliminates the importance of counterparty creditworthiness in pricing swaps cleared through a given DCO. That is, by making the counterparty creditworthiness of all swaps of a certain type essentially the same, prices should reflect factors related to the terms of the swap, rather than the idiosyncratic risk posed by the entities trading it.

As discussed in section II.B.iii.a above, CME, Eurex, LCH, and SGX obtain adequate pricing data for the interest rate swaps that they clear. Each of these DCOs establishes a rule framework for its pricing methodology and rigorously tests its pricing models

to ensure that the cornerstone of its risk management regime is as sound as possible.

### iv. Sound Risk Management Practices

If a firm enters into uncleared and uncollateralized swaps to hedge certain positions and then the counterparty to those swaps defaults unexpectedly, the firm could be left with large outstanding exposures. Even for uncleared swaps that are subject to the Commission's uncleared swap margin regulations, some counterparty credit risk remains.<sup>135</sup> As stated above, when a swap is cleared the DCO becomes the counterparty facing each of the two original participants in the swap. This standardizes and reduces counterparty risk for each of the two original participants. To the extent that a market participant's hedges comprise swaps that are required to be cleared, the requirement enhances their risk management practices by reducing their counterparty risk.

In addition, required clearing reduces the complexity of unwinding or transferring swap positions from large entities that default. Procedures for transfer of swap positions and mutualization of losses among DCO members are already in place, and the Commission anticipates that they are much more likely to function in a manner that enables rapid transfer of defaulted positions than legal processes that would surround the enforcement of bilateral contracts for uncleared swaps.<sup>136</sup>

Central clearing has evolved since the 2009 G20 Pittsburgh Summit, when G20 leaders committed to central clearing of all standardized swaps. The percentage of the swap market that is centrally cleared has increased significantly, clearinghouses have expanded their offerings, and the range of banks and other financial institutions that submit swaps to clearinghouses has broadened. At the same time, the numbers of swap clearinghouses and swap clearing

<sup>135</sup> For example, there is a small risk of a sudden price move so large that a counterparty would be unable to post sufficient variation margin to cover the loss, which may exceed the amount of initial margin posted, and could be forced into default.

<sup>136</sup> As discussed in sections II.A and V.B., sound risk management practices are critical for all DCOs, especially those offering clearing for interest rate swaps. In section II.B.ii, the Commission considered whether each § 39.5(b) submission under review was consistent with the core principles for DCOs. In particular, the Commission considered the DCO submissions in light of Core Principle D, which relates to risk management. See also section II.B.iii for a discussion of the effect on the mitigation of systemic risk in the interest rate swap market, as well as the protection of market participants during insolvency events at either the clearing member or DCO level.

members has remained highly concentrated. This has created concerns about a concentration of credit and liquidity risk at clearinghouses that could have systemic implications.<sup>137</sup> However, the Commission believes that DCOs are capable of risk managing the swaps that are the subject of this proposed determination. Moreover, because only a very small percentage of the swap market would be affected by this proposed clearing requirement determination and because significant percentages of the swaps covered by this proposed determination are already cleared voluntarily, this proposed determination would only marginally increase the extent to which credit risk and liquidity risk is concentrated at DCOs. The Commission requests comments on this issue.

### v. Other Public Interest Considerations

In September 2009, the President and the other leaders of the G20 nations met in Pittsburgh and committed to a program of action that includes, among other things, central clearing of all standardized swaps.<sup>138</sup> The Commission believes that this clearing requirement would represent another step toward the fulfillment of the G20's commitment.

## VI. Related Matters

### A. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) requires agencies to consider whether the rules they propose will have a significant economic impact on a substantial number of small entities and, if so, provide a regulatory flexibility analysis respecting the impact.<sup>139</sup> The proposed clearing requirement determination contained in this proposed rulemaking will not affect any small entities, as the RFA uses that term. Pursuant to section 2(e) of the CEA, only eligible contract participants (ECPs) may enter into swaps, unless the swap is listed on a DCM. The Commission has previously determined that ECPs are not small entities for purposes of the RFA.<sup>140</sup> The proposed clearing requirement determination would only affect ECPs because all

<sup>137</sup> See Dietrich Domanski, Leonardo Gambacorta, and Cristina Picillo, "Central clearing: Trends and current issues," BIS Quarterly Review, Dec. 2015, available at: <http://www.bis.org/publ/qtrpdf/rqt1512g.pdf>; and 2015 Financial Stability Report published by the Office of Financial Research of the U.S. Department of the Treasury, available at: [http://financialresearch.gov/financial-stability-reports/files/OFR\\_2015-Financial-Stability-Report\\_12-15-2015.pdf](http://financialresearch.gov/financial-stability-reports/files/OFR_2015-Financial-Stability-Report_12-15-2015.pdf).

<sup>138</sup> The G20 Leaders Statement made in Pittsburgh is available at: <http://www.g20.utoronto.ca/2009/2009communiqu0925.html>.

<sup>139</sup> 5 U.S.C. 601 *et seq.*

<sup>140</sup> 66 FR 20740, 20743 (Apr. 25, 2001).

<sup>134</sup> See section II.B.iii.b and section II.B.ii i.e.

persons that are not ECPs are required to execute their swaps on a DCM, and all contracts executed on a DCM must be cleared by a DCO, as required by statute and regulation, not by operation of any clearing requirement determination. Therefore, the Chairman, on behalf of the Commission, hereby certifies pursuant to 5 U.S.C. 605(b) that this proposed rulemaking will not have a significant economic impact on a substantial number of small entities.

**B. Paperwork Reduction Act**

The Paperwork Reduction Act (PRA)<sup>141</sup> imposes certain requirements on federal agencies, including the Commission, in connection with

conducting or sponsoring any collection of information as defined by the PRA. This rulemaking will not require a new collection of information from any persons or entities.

**List of Subjects in 17 CFR Part 50**

Business and industry, Clearing, Swaps.

For the reasons set forth in the preamble, the Commodity Futures Trading Commission proposes to amend 17 CFR part 50 as follows:

**PART 50—CLEARING REQUIREMENT AND RELATED RULES**

■ 1. The authority citation for part 50 continues to read as follows:

**Authority:** 7 U.S.C. 2(h) and 7a–1 as amended by Pub. L. 111–203, 124 Stat. 1376.

■ 2. Revise § 50.4(a) to read as follows:

**§ 50.4 Classes of swaps required to be cleared.**

(a) *Interest rate swaps.* Swaps that have the following specifications are required to be cleared under section 2(h)(1) of the Act, and shall be cleared pursuant to the rules of any derivatives clearing organization eligible to clear such swaps under § 39.5(a) of this chapter.

Specification	Fixed-to-Floating Swap Class					
1. Currency .....	Australian Dollar (AUD).	Canadian Dollar (CAD).	Euro (EUR) .....	Hong Kong Dollar (HKD).	Mexican Peso (MXN).	Norwegian Krone (NOK).
2. Floating Rate Indexes .....	BBSW .....	CDOR .....	EURIBOR .....	HIBOR .....	TIEE .....	NIBOR.
3. Stated Termination Date Range.	28 days to 30 years.	28 days to 30 years.	28 days to 50 years.	28 days to 10 years.	28 days to 21 years.	28 days to 10 years.
4. Optionality .....	No .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts	No .....	No .....	No .....	No .....	No .....	No.

Specification	Fixed-to-Floating Swap Class						
1. Currency .....	Polish Zloty (PLN).	Singapore Dollar (SGD).	Swedish Krona (SEK).	Swiss Franc (CHF).	Sterling (GBP).	U.S. Dollar (USD).	Yen (JPY).
2. Floating Rate Indexes .....	WIBOR .....	SOR-VWAP	STIBOR .....	LIBOR .....	LIBOR .....	LIBOR .....	LIBOR.
3. Stated Termination Date Range.	28 days to 10 years.	28 days to 10 years.	28 days to 15 years.	28 days to 30 years.	28 days to 50 years.	28 days to 50 years.	28 days to 30 years.
4. Optionality .....	No .....	No .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts.	No .....	No .....	No .....	No .....	No .....	No .....	No.

Specification	Basic Swap Class				
1. Currency .....	Australian Dollar (AUD).	Euro (EUR) .....	Sterling (GBP) .....	U.S. Dollar (USD)	Yen (JPY).
2. Floating Rate Indexes .....	BBSW .....	EURIBOR .....	LIBOR .....	LIBOR .....	LIBOR.
3. Stated Termination Date Range .....	28 days to 30 years.	28 days to 50 years.	28 days to 50 years.	28 days to 50 years.	28 days to 30 years.
4. Optionality .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No .....	No.

Specification	Forward Rate Agreement Class			
1. Currency .....	Australian Dollar (AUD).	Euro (EUR) .....	Polish Zloty (PLN).	Norwegian Krone (NOK).
2. Floating Rate Indexes .....	BBSW .....	EURIBOR .....	WIBOR .....	NIBOR.
3. Stated Termination Date Range .....	3 days to 3 years.	3 days to 3 years.	3 days to 2 years.	3 days to 2 years.
4. Optionality .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No.

<sup>141</sup> 44 U.S.C. 3507(d).

Specification	Forward Rate Agreement Class			
1. Currency .....	Swedish Krona (SEK).	Sterling (GBP) ..	U.S. Dollar (USD).	Yen (JPY).
2. Floating Rate Indexes .....	STIBOR .....	LIBOR .....	LIBOR .....	LIBOR.
3. Stated Termination Date Range .....	3 days to 3 years.	3 days to 3 years.	3 days to 3 years.	3 days to 3 years.
4. Optionality .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No.

Specification	Overnight Index Swap Class				
1. Currency .....	Australian Dollar (AUD).	Canadian Dollar (CAD).	Euro (EUR) ....	Sterling (GBP)	U.S. Dollar (USD).
2. Floating Rate Indexes .....	AONIA-OIS ...	CORRA-OIS	EONIA .....	SONIA .....	FedFunds.
3. Stated Termination Date Range .....	7 days to 2 years.	7 days to 2 years.	7 days to 3 years.	7 days to 3 years.	7 days to 3 years.
4. Optionality .....	No .....	No .....	No .....	No .....	No.
5. Dual Currencies .....	No .....	No .....	No .....	No .....	No.
6. Conditional Notional Amounts .....	No .....	No .....	No .....	No .....	No.

\* \* \* \* \*

Issued in Washington, DC, on June 9, 2016, by the Commission.

**Christopher J. Kirkpatrick,**  
*Secretary of the Commission.*

**Note:** The following appendix will not appear in the Code of Federal Regulations.

**Appendix to Clearing Requirement Determination Under Section 2(h) of the CEA for Interest Rate Swaps—Commission Voting Summary**

On this matter, Chairman Massad and Commissioners Bowen and Giancarlo voted in the affirmative. No Commissioner voted in the negative.

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