

COMMITTEE ON CAPITAL MARKETS REGULATION

November 22, 2016

U.S. Commodity Futures Trading Commission
1155 21st Street, NW
Washington, DC 20581
Attn: Christopher Kirkpatrick, Secretary of the Commission

Re: Need for Increased Transparency Regarding Clearinghouses' Margin Models

Dear Mr. Kirkpatrick,

The Committee on Capital Markets Regulation (the “**Committee**”) commends the Commodity Futures Trading Commission (the “**CFTC**”) for providing a forum for discussion of the need for greater transparency regarding clearinghouse margining practices during its October 2016 staff roundtable. The Committee would like to take this opportunity to provide further comment on this issue.

Founded in 2006, the Committee is dedicated to enhancing the competitiveness of U.S. capital markets and ensuring the stability of the U.S. financial system. Our membership includes thirty-five leaders drawn from the finance, investment, business, law, accounting, and academic communities. The Committee is chaired jointly by R. Glenn Hubbard (Dean, Columbia Business School) and John L. Thornton (Chairman, The Brookings Institution) and directed by Hal S. Scott (Nomura Professor and Director of the Program on International Financial Systems, Harvard Law School). The Committee is an independent and nonpartisan 501(c)(3) research organization, financed by contributions from individuals, foundations, and corporations.

The Committee has long supported efforts to bring liquid and standardized swaps into clearinghouses.¹ And indeed, through the CFTC’s efforts, approximately 84% of total notional in interest-rate swaps and 82% of total notional in index credit-default swaps reported to U.S. swap data repositories is now centrally cleared.²

But as this expansion in central clearing proceeds, it becomes ever more critical to ensure that clearing firms and their clients are able to predict the amount of margin that a clearinghouse (also known as a “central counterparty” or “**CCP**”) will demand of them in response to a given market event.³ Such predictions require a detailed understanding of the CCP’s margin

¹ See, e.g., Letter from the Committee on Capital Markets Regulation to the U.S. Senate Committee on Banking, Housing, and Urban Affairs and the U.S. House of Representatives Committee on Financial Services (Mar. 4, 2010).

² International Swaps & Derivatives Association, *SwapsInfo Second Quarter 2016 Review*, <https://www2.isda.org/functional-areas/research/research-notes/>.

³ See, e.g., Philip Stafford, *BoE Urges More Transparency in Clearing*, Financial Times (May 16, 2014) (“We are mindful of not creating a liquidity risk where a credit risk used to be It’s very important

methodologies.⁴ Although the Committee on Payments and Market Infrastructures (“CPMI”),⁵ the International Organization of Securities Commissions (“IOSCO”),⁶ and the CFTC have taken laudable steps toward an effective transparency framework for CCPs’ margin calculations, current disclosure regimes still do not elicit all of the information that clearing members and end users need to ensure that they are prepared to satisfy margin calls.⁷ Of note, this need for transparency would also apply to the new Standard Initial Margin Model for uncleared swaps. As rules governing margin for uncleared swaps apply to larger swaths of the market, it is important to ensure that all counterparties can predict how their initial-margin obligations will change in response to instances of market stress and other relevant events.

Consistent with the views of clearing members such as JP Morgan⁸ and end users such as Blackrock,⁹ the Committee believes that the CFTC should consider issuing a rulemaking that would require greater transparency concerning CCPs’ margin models. As described below, such a rule should specifically provide for the disclosure of: (i) any procyclicality inherent in the CCP’s margin models; (ii) any initial margin add-ons that the CCP imposes to compensate for risks not included in its margin models; (iii) triggers for intraday margin calls; (iv) distributional assumptions with regard to market volatility; (v) data and methodologies used to calculate pre-close-out profit and loss on defaulted positions; and (vi) backtesting protocols and results.

that clearing houses disclose properly the properties of their margin models.”) (statement of Edwin Schooling Latter, Head of Markets Infrastructure and Policy, Bank of England).

⁴ See, e.g., Blackrock, *Response to CPMI–IOSCO Further Guidance on the PFMI* vii (2016) [hereinafter “Blackrock Response to CPMI–IOSCO Guidance”]; The Clearinghouse, the International Swaps & Derivatives Association, the Futures Industry Association, the Global Financial Markets Association, & the Institute of International Finance, *Response to CPMI–IOSCO Further Guidance on the PFMI* 3 (Oct. 18, 2016) [hereinafter “Joint Association Letter”]; Blackrock, *Viewpoint: Central Clearing Counterparties and Too Big to Fail* 1–3 (Apr. 2014), <https://www.blackrock.com/corporate/en-at/literature/whitepaper/viewpoint-ccp-tbtf-april-2014.pdf> [hereinafter “Blackrock Viewpoint”].

⁵ CPMI is a committee of the Bank for International Settlements dedicated to ensuring the safety and efficiency of payment, clearing, and settlement systems in order to promote financial stability.

⁶ IOSCO is an intergovernmental body comprised of various countries’ financial regulators.

⁷ E.g., Blackrock Response to CPMI–IOSCO Guidance; Joint Association Letter at 3; CFTC Staff Roundtable on CPMI–IOSCO Guidance on CCP Resilience and Recovery (Oct. 6, 2016), http://www.cftc.gov/PressRoom/Events/opaevent_cftcstaff100616 [hereinafter “CFTC Roundtable”]; see also *Hearing to Review the Impact of the G-20 Clearing and Trade Execution Requirements*, Before the Subcommittee on Commodity Exchanges, Energy, and Credit of the U.S. House of Representatives Committee on Agriculture (June 14, 2016) (Testimony of Marnie Rosenberg, Global Head of Clearinghouse Risk and Strategy, JP Morgan) [hereinafter “Rosenberg Congressional Testimony”].

⁸ See Rosenberg Congressional Testimony; Marnie Rosenberg, JP Morgan, *CCP R&R: Where are We and What is Still Needed to Avoid “Too Big to Fail”?* (Apr. 2014 FRB Chicago OTC Derivatives Symposium Panel: CCP Loss Allocation and “End of Waterfall” Scenarios) (“It is known and widely discussed that CCPs commonly suffer from [I]ack transparency to their members and other participants”) [hereinafter “JP Morgan CCP Presentation”].

⁹ See Blackrock Response to CPMI–IOSCO Guidance; Blackrock Viewpoint.

The Existing Regulatory Regime

Under the *Principles for Financial Market Infrastructures* (“**PFMI**”)¹⁰ and related supplements and guidance jointly issued by CPMI and IOSCO, CCPs must have the capacity to make intraday calls for initial margin and variation margin¹¹ from clearing members in response to instances of market upheaval or credit weakness that expose the clearinghouse to default risks.¹² National CCP regulators such as the CFTC and the Bank of England (“**BOE**”) have incorporated the PFMI into their regulations.¹³ Accordingly, each CCP’s rulebook reserves to the CCP the right to demand additional initial or variation margin whenever the CCP deems such a demand necessary.¹⁴

In December 2012 CPMI–IOSCO released the *Financial Market Infrastructure Disclosure Framework* (the “**2012 Disclosure Framework**”) as a supplement to the PFMI.¹⁵ The 2012 Disclosure Framework required CCPs to publish a narrative description of their respective approaches to margin calculation but did not mandate disclosure of specific parameters. Then, in February 2015 CPMI–IOSCO published more granular transparency requirements, termed *Public Quantitative Disclosure Standards for Central Counterparties* (the “**Quantitative Disclosure Standards**”), which oblige each CCP to disclose the type of initial margin models it employs for each clearing service and several key parameters of the model, including: (i) the CCP’s target confidence level for margin coverage;¹⁶ (ii) the assumed close-out period for each product (also known as the “replacement period,” “holding period,” or “margin period of risk”); (iii) the length of the data look-back period; and (iv) any weighting applied to historical data.¹⁷

Most national regulators define the disclosure requirements for CCPs within their jurisdiction by reference to the CPMI–IOSCO standards. For example, the CFTC’s rules

¹⁰ CPMI–IOSCO, *Principles for Financial Market Infrastructures* (Dec. 2012), <http://www.bis.org/cpmi/publ/d101.htm> [hereinafter “PFMI”].

¹¹ Initial margin is collateral that is posted and collected to cover potential changes in the value of a position that may occur after a counterparty has defaulted but before the defaulting counterparty’s position is closed out (i.e., sold to a solvent replacement counterparty). Variation margin is exchanged on a daily basis to settle actual changes in the counterparties’ positions, thereby reducing unrealized gains and losses to zero. See Committee on Capital Markets Regulation, Comment Letter on Proposed Rule on Margin for Uncleared Swaps 4–5 (Nov. 24, 2014), http://www.capmktreg.org/wp-content/uploads/2014/11/2014-11-24.CCMR_non-cleared.swaps_letter.pdf.

¹² PFMI at 52, 54.

¹³ See, e.g., 17 C.F.R. § 39.37; BOE, *The Bank of England’s Supervision of Financial Market Infrastructures: Annual Report* 14, 25 (Mar. 2016), <http://www.bankofengland.co.uk/publications/Documents/fmi/annualreport2016.pdf> [hereinafter “2016 BOE FMI Supervision Report”].

¹⁴ See, e.g., LCH.Clearnet, *General Regulations of LCH.Clearnet Ltd.* 103–05 (Sept. 2016); CME Group, *CME Rulebook* (Rules 820, 824); ICE Clear Europe, *Clearing Rules* 135–37 (Sept. 2016).

¹⁵ *Principles for Financial Market Infrastructures: Disclosure Framework and Assessment Methodology* 1, 31 (Dec. 2012), <http://www.bis.org/cpmi/publ/d106.pdf> [hereinafter “2012 Disclosure Framework”].

¹⁶ For example, LCH.Clearnet uses a 99.7% confidence level, meaning that it aims to ensure that its margin requirements cover 99.7% of all market moves in any given post-default replacement period. The PFMI provide that a CCP should calculate initial margin to meet a confidence level of at least 99%.

¹⁷ Historically based volatility predictors often assign a greater weight to more recent data.

governing systemically important CCPs provide that such a CCP must “[c]omplete and publicly disclose its responses to the 2012 Disclosure Framework for Financial Market Infrastructures published by CPMI and IOSCO.”¹⁸ Similarly, the BOE currently requires U.K.-regulated CCPs’ compliance with the CPMI–IOSCO Quantitative Disclosure Standards.¹⁹

Need for Further Disclosures

Although the CFTC regime represents a commendable move toward transparency, the disclosures it requires are not sufficient to allow clearing members and their clients to prepare for intraday CCP margin calls, as clearing members, end users, and agency staff recognized during the CFTC’s October roundtable.²⁰ The CFTC should consider a rulemaking to increase transparency with respect to CCPs’ margin-setting processes, including disclosure of the below-described critical aspects of a CCP’s margin models:

1. Inherent procyclicality

- a. During the CFTC’s recent staff roundtable, clearing members, end users, and CFTC staff stressed the need to measure and disclose any procyclicality—meaning, in this context, any tendency to raise margin requirements in times of market stress—that is inherent in a CCP’s margin models, as such a tendency can exacerbate liquidity pressures facing clearing members and end users and force fire sales of assets.
- b. A 2014 Bank of England paper likewise highlighted the importance of transparency concerning procyclicality in initial margin models, also emphasizing that although margin models should be risk-sensitive, excessive procyclicality in a margin model can impose substantial liquidity burdens on clearing members and their clients just when they are least able to absorb such stressors.²¹
- c. A comment paper by The Clearinghouse, the International Swaps & Derivatives Association, the Futures Industry Association, the Global Financial Markets Association, and the Institute of International Finance (the “**Joint Association Letter**”)²² on the August 2016 PFMI Consultative Report on Resilience and Recovery of Central Counterparties (CCPs) highlighted the following:
 - i. CCPs should adopt appropriate and conservative anti-procyclicality measures, taking into account the specific

¹⁸ 17 C.F.R. § 39.37.

¹⁹ 2016 BOE FMI Supervision Report at 14, 25.

²⁰ See CFTC Roundtable.

²¹ David Murphy, Michalis Vasios, & Nick Vause, Bank of England, *Financial Stability Paper No. 29: An Investigation into the Procyclicality of Risk-Based Initial Margin Models* (May 2014).

²² Joint Association Letter at 3.

characteristics of cleared contracts and at least ten years of history of patterns in changes in volatility regimes.

- ii. Each CCP's policy should make clear how the different components of a CCP's risk-management system (*e.g.*, base initial margins, add-ons, stress margin, intraday margin, default fund increases, and collateral haircuts) interact with each other to affect procyclicality.²³

2. Initial margin “add-ons”

- a. Predicting a CCP's intraday initial margin calls requires full disclosure of any add-ons—*i.e.*, any margin requirements designed to compensate for risks not included in the CCP's standard initial-margin model, such as market risks arising from relatively large positions as well as risks specific to a particular industry or geographic region or a particular clearing member.²⁴ Each CCP should provide greater disclosure regarding the specific add-ons that it uses, including those designed to address wrong-way risk, model risk, liquidity risk, concentration risk (including interoperable arrangements), and basis risk.
- b. The 2016 Joint Association Letter also notes that most CCPs calculate margin add-ons separately from initial margin amounts, making it difficult for clearing members to conduct holistic risk management of margin models and to identify margin associated with individual client accounts. The CCP should look to reduce reliance on IM add-ons by direct incorporation of liquidity and concentration premiums in their margin models in a formulaic and transparent way. CCPs should provide sufficient reporting to allow clearing members to map margin add-ons to individual client accounts so that clearing members can appropriately apportion such add-ons to each of their clients.²⁵

3. Triggers for intraday margin calls

- a. CCPs should provide greater transparency regarding the specific events that will trigger intraday margin calls to allow clearing members to manage liquidity needs, especially in periods of market stress.

²³ Joint Association Letter at 21-22.

²⁴ Federal Reserve Bank of New York, *Recommendations for Supporting Clearing Member Due Diligence of Central Counterparties* (Feb. 2013), https://www.newyorkfed.org/medialibrary/microsites/prc/files/report_130205.pdf [hereinafter “FRBNY Disclosure Template”]; Joint Association Letter at 32–33.

²⁵ Joint Association Letter at 22.

4. Distributional assumptions

- a. Clearing members and end users need a clear understanding of the CCP's assumptions regarding the distribution of volatility.²⁶ For example, a CCP's model may assume a normal distribution, or the model may employ extreme value theory in an effort to assess the likelihood that price changes will be more extreme than those previously observed.²⁷
- b. The CCP should also identify any volatility floors used in its models.

5. Methods and data used to calculate profit and loss

- a. Each CCP should provide the methodologies and data that it uses to simulate post-default, pre-close-out profit and loss on a position in given scenarios for initial-margin purposes, as such disclosures are necessary to allow clearing members and their clients to approximate future CCP margin demands.²⁸

6. Backtesting sufficiency and transparency (comments leveraged from aforementioned Joint Association commentary)²⁹

- a. CCPs should be required to conduct regular and representative backtesting on a static portfolio, which evaluates whether margin requirements on a given day's portfolio would be sufficient over the economic conditions that existed in the past. Margins and hypothetical profit and loss should be compared on these portfolios over a significant backtest period (so-called static portfolio backtesting).
- b. CCPs should regularly report backtesting results to clearing participants. CCPs often share coverage results with risk committees and boards, but disclose to clearing participants on a less frequent basis, if at all. Additionally, risk committee members may be restricted by confidentiality requirements from sharing coverage results within their firms for internal risk management, due diligence, or any other purpose.
- c. It is important that CCPs undertake both portfolio and product-level backtesting and disclose the results to clearing members on a regular basis. Relying on portfolio-level backtesting only may allow conservatively-margined products to mask under-margined products. Product-level backtesting should capture spreads and butterflies in addition to forward outrights, as margin offsets can be overstated for these strategies.

²⁶ FRBNY Disclosure Template; Joint Association Letter at 31–32.

²⁷ See FRBNY Disclosure Template.

²⁸ See FRBNY Disclosure Template; Joint Association Letter at 31.

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