



FEDERAL REGISTER

Vol. 79

Wednesday,

No. 58

March 26, 2014

Part II

Securities and Exchange Commission

17 CFR Part 240

Standards for Covered Clearing Agencies; Proposed Rule

SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 240

[Release No. 34-71699; File No. S7-03-14]

RIN 3235-AL48

Standards for Covered Clearing Agencies

AGENCY: Securities and Exchange Commission.

ACTION: Proposed rule.

SUMMARY: The Securities and Exchange Commission (“SEC” or “Commission”) proposes to amend Rule 17Ad-22 and add Rule 17Ab2-2 pursuant to Section 17A of the Securities Exchange Act of 1934 (“Exchange Act”) and the Payment, Clearing, and Settlement Supervision Act of 2010 (“Clearing Supervision Act”), adopted in Title VIII of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (“Dodd-Frank Act”). Among other things, the proposed rules would establish standards for the operation and governance of certain types of registered clearing agencies that meet the definition of a “covered clearing agency.”

DATES: Submit comments on or before May 27, 2014.

ADDRESSES: Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission’s Internet comment form (<http://www.sec.gov/rules/proposed.shtml>); or
- Send an email to rule-comments@sec.gov. Please include File Number S7-03-14 on the subject line; or
- Use the Federal eRulemaking Portal (<http://www.regulations.gov>). Follow the instructions for submitting comments.

Paper Comments

- Send paper comments to Kevin M. O’Neill, Deputy Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-1090. All submissions should refer to File Number S7-03-14.

To help us process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission’s Internet Web site (<http://www.sec.gov/rules/proposed.shtml>).

Comments are also available for Web site viewing and printing in the Commission’s Public Reference Room, 100 F Street NE., Washington, DC 20549 on official business days between the hours of 10:00 a.m. and 3:00 p.m. All

comments received will be posted without change; the Commission does not edit personal identifying information from submissions. You should submit only information that you wish to make available publicly.

FOR FURTHER INFORMATION CONTACT:

Katherine Martin, Senior Special Counsel; Stephanie Park, Special Counsel; Mark Saltzburg, Special Counsel; Matthew Lee, Attorney-Adviser; and Abraham Jacob, Attorney-Adviser; Office of Clearance and Settlement, Division of Trading and Markets, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549-7010, at (202) 551-5710.

SUPPLEMENTARY INFORMATION: The Commission proposes to amend Rule 17Ad-22 to add new Rule 17Ad-22(e) to establish requirements for risk management, operations, and governance of registered clearing agencies that meet the definition of a “covered clearing agency.” Covered clearing agencies would include registered clearing agencies that (i) have been designated as systemically important by the Financial Stability Oversight Council (“FSOC”) and for which the Commission is the supervisory agency, pursuant to the Clearing Supervision Act (“designated clearing agencies”), (ii) provide central counterparty (“CCP”) services for security-based swaps or are involved in activities the Commission determines to have a more complex risk profile, where in either case the Commodity Futures Trading Commission (“CFTC”) is not the supervisory agency for such clearing agency as defined in Section 803(8) of the Clearing Supervision Act, or (iii) are otherwise determined to be covered clearing agencies by the Commission. The Commission also proposes to add new Rule 17Ad-22(f) to codify the Commission’s statutory authority and new Rule 17Ab2-2 to establish procedures for making determinations regarding covered clearing agencies under proposed Rule 17Ad-22(e). The Commission also proposes to amend existing Rule 17Ad-22(d) to limit its application to clearing agencies other than covered clearing agencies and to revise existing Rule 17Ad-22(a) to add 15 new definitions. The Commission has begun, and intends to continue, consultation with the FSOC and the Board of Governors of the Federal Reserve System (“the Board”) and has considered the relevant international standards as required by Section

805(a)(2)(A) of the Clearing Supervision Act.¹

Table of Contents

- I. Current Regulatory Framework for Clearing Agencies
 - A. Section 17A of the Exchange Act
 - B. OTC Swaps Clearing and the Dodd-Frank Act
 1. Title VII of the Dodd-Frank Act
 2. Title VIII of the Dodd-Frank Act
 - C. Rule 17Ad-22 Under the Exchange Act
 - D. Relevant International Standards
- II. Discussion of the Proposed Amendments to Rule 17Ad-22 and Proposed Rule 17Ab2-2
 - A. Overview
 1. Scope of Proposed Rule 17Ad-22(e)
 2. Role of Written Policies and Procedures
 3. Frequency of Review Required Under Certain Policies and Procedures
 4. Anticipated Impact of Proposed Rule 17Ad-22(e)
 5. General Request for Comments
 - B. Proposed Rule 17Ad-22(e)
 1. Proposed Rule 17Ad-22(e)(1): Legal Risk
 2. Proposed Rule 17Ad-22(e)(2): Governance
 3. Proposed Rule 17Ad-22(e)(3): Framework for the Comprehensive Management of Risks
 - a. Policies and Procedures Requirements, Periodic Review, and Annual Board Approval
 - b. Recovery and Orderly Wind-Down Plans
 - c. Risk Management and Internal Audit
 - d. Request for Comments
 4. Proposed Rules 17Ad-22(e)(4) Through (7): Financial Risk Management
 - a. Overview of Financial Risks Faced by Clearing Agencies
 - b. Current Financial Risk Management Requirements for CCPs
 - c. Proposed Rule 17Ad-22(e)(4): Credit Risk
 - i. Prefunded Financial Resources
 - ii. Combined or Separately Maintained Clearing or Guaranty Funds
 - iii. Testing the Sufficiency of Financial Resources
 - iv. Annual Conforming Model Validation
 - d. Proposed Rule 17Ad-22(e)(5): Collateral
 - e. Proposed Rule 17Ad-22(e)(6): Margin
 - i. Active Management of Model Risk
 - ii. Collection of Margin
 - iii. Ninety-Nine Percent Confidence Level
 - iv. Price Data Source
 - v. Method for Measuring Credit Exposure
 - vi. Backtesting and Sensitivity Analysis
 - vii. Annual Conforming Model Validation
 - f. Proposed Rule 17Ad-22(e)(7): Liquidity Risk
 - i. Sufficient Liquid Resources
 - ii. Qualifying Liquid Resources
 - iii. Access to Account Services at a Federal Reserve Bank or Other Relevant Central Bank
 - iv. Liquidity Providers

¹ See Committee on Payment and Settlement Systems and Technical Committee of the International Organization of Securities Commissions (“CPSS-IOSCO”), Principles for Financial Market Infrastructures (Apr. 16, 2012), available at <http://www.bis.org/publ/cpss101a.pdf> (“PFMI Report”).

- v. Maintenance and Annual Testing of Liquidity Provider Procedures and Operational Capacity
- vi. Testing the Sufficiency of Liquid Resources
- vii. Annual Conforming Model Validation
- viii. Address Liquidity Shortfalls and Seek To Avoid Unwinding Settlement
- ix. Replenishment of Liquid Resources
- x. Feasibility Analysis for "Cover Two"
- g. Request for Comments
- 5. Proposed Rule 17Ad-22(e)(8): Settlement Finality
- 6. Proposed Rule 17Ad-22(e)(9): Money Settlements
- 7. Proposed Rule 17Ad-22(e)(10): Physical Delivery Risks
- 8. Proposed Rule 17Ad-22(e)(11): Central Securities Depositories
- a. Controls To Safeguard the Rights of Securities Issuers and Holders and Prevent the Unauthorized Creation or Deletion of Securities
- b. Periodic and at Least Daily Reconciliation of Securities Maintained
- c. Protect Assets Against Custody Risk
- d. Request for Comments
- 9. Proposed Rule 17Ad-22(e)(12): Exchange-of-Value Settlement Systems
- 10. Proposed Rule 17Ad-22(e)(13): Participant-Default Rules and Procedures
- a. Address Allocation of Credit Losses
- b. Describe Replenishment of Financial Resources
- c. Test Default Procedures Annually and Following Material Changes
- d. Request for Comments
- 11. Proposed Rule 17Ad-22(e)(14): Segregation and Portability
- 12. Proposed Rule 17Ad-22(e)(15): General Business Risk
- a. Determining Liquid Net Assets for Recovery and an Orderly Wind-Down
- b. Requirements for Liquid Net Assets
- c. Plan for Raising Additional Equity
- d. Request for Comments
- 13. Proposed Rule 17Ad-22(e)(16): Custody and Investment Risks
- 14. Proposed Rule 17Ad-22(e)(17): Operational Risk Management
- 15. Proposed Rule 17Ad-22(e)(18): Access and Participation Requirements
- 16. Proposed Rule 17Ad-22(e)(19): Tiered Participation Agreements
- 17. Proposed Rule 17Ad-22(e)(20): Links
- 18. Proposed Rule 17Ad-22(e)(21): Efficiency and Effectiveness
- 19. Proposed Rule 17Ad-22(e)(22): Communication Procedures and Standards
- 20. Proposed Rule 17Ad-22(e)(23): Disclosure of Rules, Key Procedures, and Market Data
- a. Comprehensive Public Disclosure
- b. Updates to the Comprehensive Public Disclosure
- c. Request for Comments
- C. Proposed Rule 17Ab2-2
- 1. Determination That a Registered Clearing Agency is a Covered Clearing Agency
- 2. Determination That a Covered Clearing Agency is Systemically Important in Multiple Jurisdictions
- 3. Determination That a Clearing Agency Has a More Complex Risk Profile
- 4. Request for Comments
- D. Proposed Rule 17Ad-22(f)
- E. Proposed Amendment to Rule 17Ad-22(d)
- III. Paperwork Reduction Act
- A. Overview and Organization
- B. Summary of Collection of Information and Proposed Use of Information for Proposed Rule 17Ad-22(e) and Proposed Rule 17Ab2-2
- 1. Proposed Rules 17Ad-22(e)(1) Through (3): General Organization
- a. Proposed Rule 17Ad-22(e)(1)
- b. Proposed Rule 17Ad-22(e)(2)
- c. Proposed Rule 17Ad-22(e)(3)
- 2. Proposed Rules 17Ad-22(e)(4) Through (7): Financial Risk Management
- a. Proposed Rule 17Ad-22(e)(4)
- b. Proposed Rule 17Ad-22(e)(5)
- c. Proposed Rule 17Ad-22(e)(6)
- d. Proposed Rule 17Ad-22(e)(7)
- 3. Proposed Rules 17Ad-22(e)(8) Through (10): Settlement
- a. Proposed Rule 17Ad-22(e)(8)
- b. Proposed Rule 17Ad-22(e)(9)
- c. Proposed Rule 17Ad-22(e)(10)
- 4. Proposed Rules 17Ad-22(e)(11) Through (12): CSDs and Exchange-of-Value Settlement Systems
- a. Proposed Rule 17Ad-22(e)(11)
- b. Proposed Rule 17Ad-22(e)(12)
- 5. Proposed Rules 17Ad-22(e)(13) Through (14): Default Management
- a. Proposed Rule 17Ad-22(e)(13)
- b. Proposed Rule 17Ad-22(e)(14)
- 6. Proposed Rules 17Ad-22(e)(15) Through (17): General Business and Operational Risk Management
- a. Proposed Rule 17Ad-22(e)(15)
- b. Proposed Rule 17Ad-22(e)(16)
- c. Proposed Rule 17Ad-22(e)(17)
- 7. Proposed Rules 17Ad-22(e)(18) Through (20): Access
- a. Proposed Rule 17Ad-22(e)(18)
- b. Proposed Rule 17Ad-22(e)(19)
- c. Proposed Rule 17Ad-22(e)(20)
- 8. Proposed Rules 17Ad-22(e)(21) Through (22): Efficiency
- a. Proposed Rule 17Ad-22(e)(21)
- b. Proposed Rule 17Ad-22(e)(22)
- 9. Proposed Rule 17Ad-22(e)(23): Disclosure
- 10. Proposed Rule 17Ab2-2
- C. Respondents
- D. Total Annual Reporting and Recordkeeping Burden for Proposed Rule 17Ad-22(e)
- 1. Proposed Rules 17Ad-22(e)(1) Through (3): General Organization
- a. Proposed Rule 17Ad-22(e)(1)
- b. Proposed Rule 17Ad-22(e)(2)
- c. Proposed Rule 17Ad-22(e)(3)
- 2. Proposed Rules 17Ad-22(e)(4) Through (7): Financial Risk Management
- a. Proposed Rule 17Ad-22(e)(4)
- b. Proposed Rule 17Ad-22(e)(5)
- c. Proposed Rule 17Ad-22(e)(6)
- d. Proposed Rule 17Ad-22(e)(7)
- 3. Proposed Rules 17Ad-22(e)(8) Through (10): Settlement
- a. Proposed Rule 17Ad-22(e)(8)
- b. Proposed Rule 17Ad-22(e)(9)
- c. Proposed Rule 17Ad-22(e)(10)
- 4. Proposed Rules 17Ad-22(e)(11) Through (12): CSDs and Exchange-of-Value Settlement Systems
- a. Proposed Rule 17Ad-22(e)(11)
- b. Proposed Rule 17Ad-22(e)(12)
- 5. Proposed Rules 17Ad-22(e)(13) Through (14): Default Management
- a. Proposed Rule 17Ad-22(e)(13)
- b. Proposed Rule 17Ad-22(e)(14)
- 6. Proposed Rules 17Ad-22(e)(15) Through (17): General Business and Operational Risk Management
- a. Proposed Rule 17Ad-22(e)(15)
- b. Proposed Rule 17Ad-22(e)(16)
- c. Proposed Rule 17Ad-22(e)(17)
- 7. Proposed Rules 17Ad-22(e)(18) Through (20): Access
- a. Proposed Rule 17Ad-22(e)(18)
- b. Proposed Rule 17Ad-22(e)(19)
- c. Proposed Rule 17Ad-22(e)(20)
- 8. Proposed Rules 17Ad-22(e)(21) Through (22): Efficiency
- a. Proposed Rule 17Ad-22(e)(21)
- b. Proposed Rule 17Ad-22(e)(22)
- 9. Proposed Rule 17Ad-22(e)(23): Disclosure
- 10. Total Burden for Proposed Rule 17Ad-22(e)
- E. Total Annual Reporting and Recordkeeping Burden for Proposed Rule 17Ab2-2
- F. Collection of Information is Mandatory
- G. Confidentiality
- H. Request for Comments
- IV. Economic Analysis
- A. Introduction
- B. Economic Baseline
- 1. Overview
- 2. Current Regulatory Framework for Clearing Agencies
- a. Basel III Capital Requirements
- b. Other Regulatory Efforts
- 3. Current Practices
- a. General Organization
- i. Legal Risk
- ii. Governance
- iii. Framework for the Comprehensive Management of Risks
- b. Financial Risk Management
- i. Credit Risk
- ii. Collateral and Margin
- iii. Liquidity Risk
- c. Settlement
- d. CSDs and Exchange-of-Value Settlement Systems
- i. CSDs
- ii. Exchange-of-Value Settlement Systems
- e. Default Management
- i. Participant-Default Rules and Procedures
- ii. Segregation and Portability
- f. General Business and Operational Risk Management
- i. General Business Risk
- ii. Custody and Investment Risks
- iii. Operational Risk
- g. Access
- i. Access and Participation Requirements
- ii. Tiered Participation Arrangements
- iii. Links
- h. Efficiency
- i. Efficiency and Effectiveness
- ii. Communication Procedures and Standards
- i. Transparency
- 4. Determinations by the Commission
- C. Consideration of Benefits, Costs, and the Effect on Competition, Efficiency, and Capital Formation
- 1. General Economic Considerations

- a. Systemic Risk
- b. Discretion
- c. Market Integrity
- d. Concentration
- e. Qualifying CCP Status and Externalities on Clearing Members
- 2. Effect on Competition, Efficiency, and Capital Formation
 - a. Competition
 - b. Efficiency
 - c. Capital Formation
- 3. Effect of Proposed Amendments to Rule 17Ad–22 and Proposed Rule 17Ab2–2
 - a. Proposed Rule 17Ad–22(e)
 - i. Proposed Rule 17Ad–22(e)(1): Legal Risk
 - ii. Proposed Rule 17Ad–22(e)(2): Governance
 - iii. Proposed Rule 17Ad–22(e)(3): Comprehensive Framework for the Management of Risks
 - iv. Proposed Rules 17Ad–22(e)(4) Through (7): Financial Risk Management
 - (1) Proposed Rule 17Ad–22(e)(4): Credit Risk
 - (2) Proposed Rule 17Ad–22(e)(5): Collateral
 - (3) Proposed Rule 17Ad–22(e)(6): Margin
 - (4) Proposed Rule 17Ad–22(e)(7): Liquidity Risk
 - (5) Testing and Validation of Risk Models
 - v. Proposed Rules 17Ad–22(e)(8) Through (10): Settlement and Physical Delivery
 - vi. Proposed Rule 17Ad–22(e)(11): CSDs
 - vii. Proposed Rule 17Ad–22(e)(12): Exchange-of-Value Settlement Systems
 - viii. Proposed Rule 17Ad–22(e)(13): Participant-Default Rules and Procedures
 - ix. Proposed Rule 17Ad–22(e)(14): Segregation and Portability
 - x. Proposed Rule 17Ad–22(e)(15): General Business Risk
 - xi. Proposed Rule 17Ad–22(e)(16): Custody and Investment Risks
 - xii. Proposed Rule 17Ad–22(e)(17): Operational Risk Management
 - xiii. Proposed Rules 17Ad–22(e)(18) Through (20): Membership Requirements, Tiered Participation, and Linkages
 - (1) Proposed Rule 17Ad–22(e)(18): Member Requirements
 - (2) Proposed Rule 17Ad–22(e)(19): Tiered Participation Arrangements
 - (3) Proposed Rule 17Ad–22(e)(20): Links
 - xiv. Proposed Rule 17Ad–22(e)(21): Efficiency and Effectiveness
 - xv. Proposed Rule 17Ad–22(e)(22): Communication Procedures and Standards
 - xvi. Proposed Rule 17Ad–22(e)(23): Disclosure of Rules, Key Procedures, and Market Data
- b. Proposed Rule 17Ab2–2
- c. Proposed Rule 17Ad–22(f)
- d. Quantifiable Costs and Benefits
- D. Request for Comments
- V. Regulatory Flexibility Act Certification
 - A. Registered Clearing Agencies
 - B. Certification
- VI. Small Business Regulatory Enforcement Fairness Act
- VII. Statutory Authority and Text of Amended Rule 17AD–22 and Proposed Rule 17AB2–2

I. Current Regulatory Framework for Clearing Agencies

A. Section 17A of the Exchange Act

When Congress added Section 17A to the Exchange Act as part of the Securities Acts Amendments of 1975, it directed the Commission to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of securities transactions.² In Section 17A of the Exchange Act, Congress directed the Commission to have due regard for the public interest, the protection of investors, the safeguarding of securities and funds, and maintenance of fair competition among brokers and dealers, clearing agencies, and transfer agents.³ The Commission's ability to achieve these goals and its supervision of securities clearance and settlement systems is based upon the regulation of clearing agencies registered with the Commission ("registered clearing agencies"). Clearing agencies are broadly defined under the Exchange Act and undertake a variety of functions.⁴ One such function is to act as a CCP, which is an entity that interposes itself between the counterparties to a trade.⁵ Over the years, registered clearing agencies have become an essential part of the infrastructure of the U.S. securities markets.⁶ Registered clearing

agencies help reduce the costs and increase the safety and efficiency of securities trading and are required to be structured to manage and reduce counterparty risk.⁷

Section 17A of the Exchange Act and Rule 17Ab2–1 require entities to register with the Commission prior to performing the functions of a clearing agency.⁸ Under the statute, the Commission is not permitted to grant registration unless it determines that the rules and operations of the clearing agency meet the standards set forth in Section 17A of the Exchange Act.⁹ If the Commission registers a clearing agency, the Commission oversees the clearing agency to facilitate compliance with the Exchange Act using various tools that include, among other things, the rule filing process for self-regulatory organizations ("SROs") and on-site examinations by Commission staff.¹⁰ The Commission also oversees registered clearing agencies through regular contact, including onsite visits, by Commission staff with clearing agency senior management and other personnel and ongoing interactions of Commission staff with the registered

Commission, the Board & CFTC to the Senate Committees on Banking, Housing & Urban Affairs and Agriculture in fulfillment of Section 813 of Title VIII of the Dodd-Frank Act, at 3 (stating that designated clearing entities "play a vital role in the proper functioning of financial markets and are increasingly important given the mandated central clearing of certain swaps and security-based swaps that is required by the [Dodd-Frank] Act") ("Risk Management Supervision Report").

⁷ See *id.* at 12 (describing the risk management practices of designated clearing entities and the economic and legal incentives for sound risk management).

⁸ See 15 U.S.C. 78q–1(b) and 17 CFR 240.17Ab2–1 thereunder; see also *infra* notes 20–23 and accompanying text (noting that the Dodd-Frank Act also added new paragraphs (g), (i), and (j) to Section 17A of the Exchange Act to establish requirements for any entity that performs the functions of a clearing agency for security-based swaps).

⁹ A clearing agency can be registered with the Commission only if the Commission makes a determination that the clearing agency satisfies the requirements set forth in Section 17A(b)(3)(A) through (I) of the Exchange Act. See 15 U.S.C. 78q–1(b)(3)(A) through (I). In 1980, the Commission published a statement of the views and positions of the Commission staff regarding the requirements of Section 17A in its Announcement of Standards for the Registration of Clearing Agencies. See Exchange Act Release No. 34–16900 (June 17, 1980), 45 FR 41920 (June 23, 1980).

¹⁰ Under the Clearing Supervision Act, the supervisory agency must consult annually with the Board regarding the scope and methodology of on-site examinations of designated FMUs, and those examinations may include participation by the Board, if requested. See *infra* note 32 and accompanying text; see also 15 U.S.C. 78u(a) (providing the Commission with authority to initiate and conduct investigations to identify potential violations of the federal securities laws); 15 U.S.C. 78s(h) (providing the Commission with authority to institute civil actions seeking injunctive and other equitable remedies and/or administrative proceedings).

² See 15 U.S.C. 78q–1; Report of the Senate Committee on Banking, Housing & Urban Affairs, S. Rep. No. 94–75, at 4 (1975) (urging that "[t]he Commission believes the banking and security industries must move quickly toward the establishment of a fully integrated national system for the prompt and accurate processing and settlement of securities transactions").

³ See 15 U.S.C. 78q–1(a)(2)(A).

⁴ Section 3(a)(23)(A) of the Exchange Act defines the term "clearing agency" to mean any person who acts as an intermediary in making payments or deliveries or both in connection with transactions in securities or who provides facilities for the comparison of data regarding the terms of settlement of securities transactions, to reduce the number of settlements of securities transactions, or for the allocation of securities settlement responsibilities. Such term also means any person, such as a securities depository, who acts as a custodian of securities in connection with a system for the central handling of securities whereby all securities of a particular class or series of any issuer deposited within the system are treated as fungible and may be transferred, loaned or pledged by bookkeeping entry without physical delivery of securities certificates, or otherwise permits or facilitates the settlement of securities transactions or the hypothecation or lending of securities without physical delivery of securities certificates. See 15 U.S.C. 78c(a)(23)(A).

⁵ See *id.*; see also Exchange Act Release No. 34–68080 (Oct. 22, 2012), 77 FR 66219, 66221–22 (Nov. 2, 2012) ("Clearing Agency Standards Release"). An entity that acts as a CCP for securities transactions is a clearing agency as defined in the Exchange Act and is required to register with the Commission. For further discussion of the economic effects of CCPs, see *infra* notes 19, 563, and accompanying text.

⁶ See Risk Management Supervision of Designated Clearing Entities (July 2011), Report by the

clearing agencies regarding current and expected proposed rule changes under Section 19(b) of the Exchange Act.

B. OTC Swaps Clearing and the Dodd-Frank Act

The Commission drew on its experience regulating clearing agencies to address recent developments in the over-the-counter (“OTC”) derivatives markets. In December 2008, the Commission acted to facilitate the central clearing of credit default swaps (“CDS”) by permitting certain entities that performed CCP services to clear and settle CDS on a temporary, conditional basis.¹¹ Consequently, some CDS transactions were centrally cleared prior to the enactment of the Dodd-Frank Act.

On July 21, 2010, President Barack Obama signed the Dodd-Frank Act into law.¹² The Dodd-Frank Act was enacted, among other reasons, to promote the financial stability of the United States by improving accountability and transparency in the financial system.¹³ It is intended, among other things, to bolster the existing regulatory structure and provide regulatory tools to address risks in the OTC derivatives markets, which have experienced dramatic growth in recent years and are capable of affecting significant sectors of the U.S. economy.¹⁴

1. Title VII of the Dodd-Frank Act

Title VII of the Dodd-Frank Act (“Title VII”) provides the Commission and the CFTC with enhanced authority

to regulate certain OTC derivatives in response to the 2008 financial crisis.¹⁵ Title VII provides that the CFTC will regulate “swaps,” the Commission will regulate “security-based swaps,” and both the CFTC and the Commission will regulate “mixed swaps.”¹⁶ Title VII provides the Commission with new regulatory authority over security-based swaps by requiring, among other things, that security-based swaps generally be cleared and that clearing agencies for security-based swaps register with the Commission.

The swap and security-based swap markets traditionally have been characterized by privately negotiated transactions entered into by two counterparties, in which each assumes the credit risk of the other counterparty.¹⁷ Title VII amended the Exchange Act to require that transactions in security-based swaps be cleared through a clearing agency if they are of a type that the Commission determines must be cleared, unless an exemption from mandatory clearing applies.¹⁸ When structured and operated appropriately, clearing agencies may improve the management of counterparty risk in security-based swap markets and may provide additional benefits, such as the multilateral netting of trades.¹⁹

¹⁵ See Dodd-Frank Act, 124 Stat. at 1641–1802.

¹⁶ Section 712(d) of the Dodd-Frank Act provides that the Commission and the CFTC, in consultation with the Board, shall further define the terms “swap,” “security-based swap,” “swap dealer,” “security-based swap dealer,” “major swap participant,” “major security-based swap participant,” “eligible contract participant,” and “security-based swap agreement.” 124 Stat. at 1644. The Commission and the CFTC jointly adopted rules to further define the terms “swap dealer,” “security-based swap dealer,” “major swap participant,” “major security-based swap participant,” and “eligible contract participant,” as well as rules to further define the terms “swap,” “security-based swap,” and “security-based swap agreement” and to govern the regulation of mixed swaps. See Exchange Act Release Nos. 34–67453 (July 18, 2012), 77 FR 48208 (Aug. 13, 2012); 34–66868 (Apr. 27, 2012), 77 FR 30596 (May 23, 2012).

¹⁷ See, e.g., Exchange Act Release No. 34–60372 (July 23, 2009), 74 FR 37748 (July 29, 2009), at 37748 n.2 (discussing credit default swaps).

¹⁸ See 15 U.S.C. 78c–3; see also Exchange Act Release No. 34–67286 (June 28, 2012), 77 FR 41602 (July 13, 2012) (adopting rules establishing a process for submissions for review of security-based swaps for mandatory clearing); Exchange Act Release No. 34–63556 (Dec. 15, 2010), 75 FR 79992 (Dec. 21, 2010) (proposing an end-user exception to the mandatory clearing requirement).

¹⁹ See Stephen G. Cecchetti, Jacob Gyntelberg & Marc Hollanders, Central Counterparties for Over-the-Counter Derivatives, BIS Q. Rev., Sept. 2009, at 46, available at http://www.bis.org/publ/qtrpdf/r_qt0909f.pdf (stating that the structure of a CCP “has three clear benefits. First, it improves the management of counterparty risk. Second, it allows the CCP to perform multilateral netting of exposures as well as payments. Third, it increases transparency by making information on market

Title VII also added new provisions to the Exchange Act that require entities performing the functions of a clearing agency with respect to security-based swaps (“security-based swap clearing agencies”) to register with the Commission and require the Commission to adopt rules with respect to security-based swap clearing agencies.²⁰ Specifically, new Section 17A(j) requires the Commission to adopt rules governing security-based swap clearing agencies, and new Section 17A(i) gives the Commission authority to promulgate rules that establish standards for security-based swap clearing agencies.²¹ Compliance with any such rules is a prerequisite to the registration of a clearing agency that clears security-based swaps with the Commission and is also a condition to maintain its continued registration.²² Section 17A(i) also provides that the Commission, in establishing clearing agency standards and in its oversight of clearing agencies, may conform such standards and such oversight to reflect evolving international standards.²³ Before commencing any rulemaking regarding, among other things, security-based swap clearing agencies, Title VII provides that the Commission shall consult and coordinate, to the extent possible, with the CFTC and the prudential regulators for the purpose of assuring regulatory consistency and comparability, to the extent possible.²⁴

Title VII further provides that some of the entities that the Commission permitted to clear and settle CDS on a temporary, conditional basis prior to the

activity and exposures—both prices and quantities—available to regulators and the public”) (emphasis omitted); see also Exchange Act Release No. 34–60372, supra note 17, at 37749 (discussing the benefits of using well-regulated CCPs to clear transactions in credit default swaps). But see *infra* note 563 and accompanying text (discussing the limits of clearing through central counterparties).

²⁰ See 15 U.S.C. 78q–1(g); Dodd-Frank Act, Sec. 763(b), Public Law 111–203, 124 Stat. 1376, 1768 (2010) (adding paragraph (g) to Section 17A of the Exchange Act). Pursuant to Section 774 of the Dodd-Frank Act, the requirement in Section 17A(g) of the Exchange Act for security-based swap clearing agencies to be registered with the Commission took effect on July 16, 2011. See 124 Stat. at 1802.

²¹ See 15 U.S.C. 78q–1(i), (j); Dodd-Frank Act, Sec. 763(b), 124 Stat. at 1768–69 (adding paragraphs (i) and (j) to Section 17A of the Exchange Act).

²² See *supra* note 9 (describing the requirements under Section 17A(b)(3) of the Exchange Act, 15 U.S.C. 78q–1(b)(3)).

²³ See 15 U.S.C. 78q–1(i) (stating that, in establishing standards for security-based swap clearing agencies, and in the exercise of its oversight of such a clearing agency pursuant to this title, the Commission may conform such standards or oversight to reflect evolving United States and international standards).

²⁴ See Dodd-Frank Act, Sec. 712(a)(2), 124 Stat. at 1641–42.

¹¹ The Commission authorized five entities to clear CDS. See Exchange Act Release Nos. 60372 (July 23, 2009), 74 FR 37748 (July 29, 2009), 61973 (Apr. 23, 2010), 75 FR 22656 (Apr. 29, 2010) and 63389 (Nov. 29, 2010), 75 FR 75520 (Dec. 3, 2010) (CDS clearing by ICE Clear Europe Limited); 60373 (July 23, 2009), 74 FR 37740 (July 29, 2009), 61975 (Apr. 23, 2010), 75 FR 22641 (Apr. 29, 2010) and 63390 (Nov. 29, 2010), 75 FR 75518 (Dec. 3, 2010) (CDS clearing by Eurex Clearing AG); 59578 (Mar. 13, 2009), 74 FR 11781 (Mar. 19, 2009), 61164 (Dec. 14, 2009), 74 FR 67258 (Dec. 18, 2009), 61803 (Mar. 30, 2010), 75 FR 17181 (Apr. 5, 2010) and 63388 (Nov. 29, 2010), 75 FR 75522 (Dec. 3, 2010) (CDS clearing by Chicago Mercantile Exchange, Inc.); 59527 (Mar. 6, 2009), 74 FR 10791 (Mar. 12, 2009), 61119 (Dec. 4, 2009), 74 FR 65554 (Dec. 10, 2009), 61662 (Mar. 5, 2010), 75 FR 11589 (Mar. 11, 2010) and 63387 (Nov. 29, 2010), 75 FR 75502 (Dec. 3, 2010) (CDS clearing by ICE Trust US LLC); 59164 (Dec. 24, 2008), 74 FR 139 (Jan. 2, 2009) (temporary CDS clearing by LIFFE A&M and LCH.Clearnet Ltd.) (collectively “CDS clearing exemption orders”). LIFFE A&M and LCH.Clearnet Ltd. allowed their orders to lapse without seeking renewal.

¹² See Dodd-Frank Act, Public Law 111–203, 124 Stat. 1376 (2010).

¹³ See *id.*

¹⁴ From their beginnings in the early 1980s, the notional value of these markets grew to approximately \$693 trillion globally by June 2013. See Bank for International Settlements (“BIS”), Statistical Release: OTC Derivatives Statistics at End-June 2013, at 2 (Nov. 2013), available at http://www.bis.org/publ/otc_hy1311.pdf.

July 21, 2010 enactment of the Dodd-Frank Act are deemed under the Dodd-Frank Act to be registered clearing agencies (the “deemed registered provision”).²⁵ As a result, the Chicago Mercantile Exchange, Inc. (“CME”), ICE Clear Credit LLC (“ICE”), and ICE Clear Europe LLC (“ICEEU”) became clearing agencies deemed registered with the Commission on July 16, 2011, solely for the purpose of clearing security-based swaps.

2. Title VIII of the Dodd-Frank Act

The Clearing Supervision Act, adopted in Title VIII of the Dodd-Frank Act (“Title VIII”), provides for enhanced regulation of financial market utilities (“FMUs”), such as clearing agencies that manage or operate a multilateral system for the purpose of transferring, clearing, or settling payments, securities, or other financial transactions among financial institutions or between financial institutions and the FMU.²⁶ The enhanced regulatory regime in Title VIII applies only to FMUs that the FSOC designates as systemically important (or likely to become systemically important) in accordance with Section 804 of the Clearing Supervision Act.²⁷ On July 11, 2011, the FSOC published a final rule concerning its authority to designate FMUs as systemically important.²⁸

²⁵ See 15 U.S.C. 78q–1(l). The deemed registered provision applies to certain depository institutions that cleared swaps as multilateral clearing organizations and certain derivatives clearing organizations (“DCOs”) that cleared swaps pursuant to an exemption from registration as a clearing agency before the date of enactment of the Dodd-Frank Act. Under the deemed registered provision, such a clearing agency is deemed registered for the purpose of clearing security-based swaps and is therefore required to comply with all requirements of the Exchange Act, and the rules thereunder, applicable to registered clearing agencies, including, for example, the obligation to file proposed rule changes under Section 19(b) of the Exchange Act. See *infra* note 96 (describing the requirements in Section 19(b) of the Exchange Act).

²⁶ The definition of “financial market utility” in Section 803(6) of the Clearing Supervision Act contains a number of exclusions that include, but are not limited to, certain designated contract markets, registered futures associations, swap data repositories, swap execution facilities, national securities exchanges, national securities associations, alternative trading systems, security-based swap data repositories, security-based swap execution facilities, brokers, dealers, transfer agents, investment companies and futures commission merchants. See 12 U.S.C. 5462(6)(B).

²⁷ Pursuant to Section 803(9) of the Clearing Supervision Act, an FMU is systemically important if the failure of or a disruption to the functioning of such FMU could create or increase the risk of significant liquidity or credit problems spreading among financial institutions or markets and thereby threaten the stability of the U.S. financial system. See 12 U.S.C. 5462(9).

²⁸ See 76 FR 44763 (July 27, 2011). Under Section 804 of the Clearing Supervision Act, the FSOC has the authority, on a non-delegable basis and by a

Section 806(e) of the Clearing Supervision Act requires FMUs designated as systemically important to file 60 days advance notice of changes to its rules, procedures, or operations that could materially affect the nature or level of risk presented by the FMU (“Advance Notice”).²⁹ In addition, Section 806(e) requires each supervisory agency to adopt rules, in consultation with the Board, that define and describe when a designated FMU is required to file an Advance Notice with its supervisory agency.³⁰ The Commission published a final rule concerning the Advance Notice process for designated clearing agencies on June 28, 2012.³¹ In evaluating an Advance Notice filed with the Commission, the Commission would assess, among other things, the consistency of the Advance Notice with the rules proposed herein, if adopted.

The Clearing Supervision Act also provides for enhanced coordination between the Commission, the Board, and the CFTC by facilitating examinations and information sharing. Under Section 807 of the Clearing Supervision Act, the Commission and the CFTC must consult annually with the Board regarding the scope and methodology of any examination of a designated FMU, and the Board is authorized to participate in any such examination.³² Section 809 of the Clearing Supervision Act authorizes the Commission, the Board, and the CFTC to disclose to each other copies of

vote of no fewer than two-thirds of the members then serving, including the affirmative vote of its chairperson, to designate those FMUs that the FSOC determines are, or are likely to become, systemically important. See 12 U.S.C. 5463. The FSOC may, using the same procedures as discussed above, rescind such designation if it determines that the FMU no longer meets the standards for systemic importance. Before making either determination, the FSOC is required to consult with the Board and the relevant supervisory agency (as determined in accordance with Section 803(8) of the Clearing Supervision Act). See *id.* Finally, Section 804 of the Clearing Supervision Act sets forth the procedures for giving entities a 30-day notice and the opportunity for a hearing prior to a designation or rescission of the designation of systemic importance. See *id.*

²⁹ See 12 U.S.C. 5465(e)(1)(A).

³⁰ Section 803(8) of the Clearing Supervision Act defines the term “supervisory agency” in reference to the primary regulatory authority for the FMU. For example, it provides that the Commission is the supervisory agency for any FMU that is a registered clearing agency. See 12 U.S.C. 5462(8). To the extent that an entity is both a clearing agency registered with the Commission and registered with another agency, such as a DCO registered with the CFTC, the statute requires the two agencies to agree on one agency to act as the supervisory agency, and if the agencies cannot agree on which agency has primary jurisdiction, the FSOC shall decide which agency is the supervisory agency for purposes of the Clearing Supervision Act. See 12 U.S.C. 5462(8).

³¹ See Exchange Act Release No. 34–67286 (June 28, 2012), 77 FR 41602 (July 13, 2012).

³² See 12 U.S.C. 5466.

examination reports or similar reports regarding any designated FMU.³³ It further authorizes the Commission, the Board, and the CFTC to promptly notify each other of material concerns about a designated FMU and share appropriate reports, information, or data relating to such concerns.³⁴ Section 813 of the Clearing Supervision Act requires the Commission and the CFTC to coordinate with the Board to develop risk management supervision programs for designated clearing agencies.³⁵

Section 805(a) of the Clearing Supervision Act³⁶ also provides that the Commission may prescribe risk management standards governing the operations related to payment, clearing, and settlement activities (“PCS activities”) of designated FMUs for which it acts as the supervisory agency, in consultation with the FSOC and the Board and taking into consideration relevant international standards and existing prudential requirements.³⁷

On July 18, 2012, the FSOC designated as systemically important the following registered clearing agencies: CME, The Depository Trust Company (“DTC”), Fixed Income Clearing Corporation (“FICC”), ICE, National Securities Clearing Corporation (“NSCC”), and The Options Clearing Corporation (“OCC”).³⁸ Under the Clearing Supervision Act, the Commission is the supervisory agency for DTC, FICC, NSCC, and OCC.³⁹ The

³³ See 12 U.S.C. 5468.

³⁴ See *id.*

³⁵ See 12 U.S.C. 5472; see also Risk Management Supervision Report, *supra* note 6.

³⁶ 12 U.S.C. 5464(a).

³⁷ See 12 U.S.C. 5464(a)(2) (stating that these regulations may govern the operations related to payment, clearing, and settlement activities of such designated clearing entities, and the conduct of designated activities by such financial institutions). PCS activities are defined in Section 803(7) of the Clearing Supervision Act. See 12 U.S.C. 5462(7).

³⁸ See U.S. Treasury Dep’t, Financial Stability Oversight Council Makes First Designations in Effort To Protect Against Future Financial Crises (July 18, 2012), <http://www.treasury.gov/press-center/press-releases/Pages/tg1645.aspx>; see also 12 U.S.C. 5321 (establishing the FSOC and designating its voting and non-voting members); 12 U.S.C. 5463 (describing the designation of systemic importance by the FSOC); *supra* note 28 (describing the process by which the FSOC would make or rescind a designation of systemic importance). Section 804 of the Clearing Supervision Act, 12 U.S.C. 5463, further sets forth procedures that give entities 30 days advance notice and an opportunity for a hearing prior to being designated as systemically important. See FSOC, 2012 Annual Report, at app. A, available at <http://www.treasury.gov/initiatives/fsoc/Documents/2012%20Annual%20Report.pdf>.

³⁹ See *supra* note 30 (discussing designation as the supervisory agency); see also FSOC, 2013 Annual Report, at 99–101, 113 (further discussing the same), available at <http://www.treasury.gov/initiatives/fsoc/Documents/FSOC%202013%20Annual%20Report.pdf>.

Commission jointly regulates DTC with the Board and OCC with the CFTC.⁴⁰ The Commission also jointly regulates CME and ICE with the CFTC, which serves as their supervisory agency.⁴¹

C. Rule 17Ad-22 Under the Exchange Act

On October 22, 2012, the Commission adopted Rule 17Ad-22 under the Exchange Act.⁴² Through Rule 17Ad-22, the Commission sought to strengthen the substantive regulation of registered clearing agencies, promote the safe and reliable operation of registered clearing agencies, and improve efficiency, transparency, and access to registered clearing agencies by establishing minimum requirements with due consideration given to observed practices and international standards.⁴³ At that time, the Commission noted that the implementation of Rule 17Ad-22 would be an important first step in developing the regulatory changes contemplated by Titles VII and VIII of the Dodd-Frank Act.⁴⁴ Rule 17Ad-22 requires all registered clearing agencies to establish, implement, maintain and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for their operations and risk management practices on an ongoing basis.⁴⁵ These requirements are designed to work in tandem with the SRO rule filing process and the requirement in Section 17A of the Exchange Act that the Commission must make certain determinations regarding a clearing agency's rules and operations for purposes of initial and

ongoing registration.⁴⁶ Rule 17Ad-22 does not apply to entities that are operating pursuant to an exemption from registration as a clearing agency granted by the Commission,⁴⁷ and it does not give particular consideration to issues relevant to clearing agencies designated as systemically important FMUs.

D. Relevant International Standards

In proposing amendments to Rule 17Ad-22, the Commission considered international standards, as required by Section 805(a) of the Clearing Supervision Act, that are relevant to its supervision of covered clearing agencies.⁴⁸ CPSS-IOSCO published in April 2012 the PFMI Report⁴⁹ to replace

previous standards applicable to clearing agencies contained in two earlier reports: *Recommendations for Securities Settlement Systems* (2001) ("RSSS") and *Recommendations for Central Counterparties* (2004) ("RCCP") (collectively "CPSS-IOSCO Recommendations").⁵⁰ Commission staff participated in the development and drafting of the PFMI Report,⁵¹ and the Commission believes that the standards set forth in the PFMI Report are generally consistent with the requirements applicable to clearing agencies set forth in the Exchange Act.⁵² Regulatory authorities around the world are in various stages of updating their regulatory regimes to adopt measures that are in line with the standards set forth in the PFMI Report.⁵³ The rule

home jurisdiction. See PFMI Report, *supra* note 1, at 131 & n.177 (noting the "presumption . . . that all CSDs, SSSs, CCPs, and TRs are systemically important because of their critical roles in the markets they serve," but also noting that ultimately "national law will dictate the criteria to determine whether an FMI is systemically important").

The Commission notes that the PFMI Report's definition of "financial market infrastructure" is consistent with the Commission's prior use of the term. See Study of Unsafe and Unsound Practices of Brokers and Dealers, H.R. Doc. No. 231, 92d Cong., 1st Sess. 13 (1971) (defining "financial market infrastructure" as a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions).

⁵⁰ The CPSS-IOSCO Recommendations are available at <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD123.pdf> and <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD176.pdf>.

The Board applies these standards in its supervisory process and expects systemically important FMUs, as determined by the Board and subject to its authority, to complete a self-assessment against the standards set forth in the policy. See Financial Market Utilities, 77 FR 45907 (Aug. 2, 2012) (the Board adopting Regulation HH for FMUs) ("Reg. HH"); Policy on Payments System Risk, 72 FR 2518 (Jan. 12, 2007).

The Board has proposed to amend the standards in Regulation HH to replace the current standards for payment systems with standards based those set forth in the PFMI Report. It has also proposed to amend its Policy on Payments System Risk. See *infra* note 53.

⁵¹ Commission staff co-chaired the Editorial Team, a working group within CPSS-IOSCO that drafted both the consultative and final versions of the PFMI Report.

⁵² See 15 U.S.C. 78q-1; 15 U.S.C. 78s(b).

⁵³ See CPSS-IOSCO, Implementation Monitoring of PFMI—Level 1 Assessment Report (Aug. 2013), available at <http://www.bis.org/publ/cpss111.pdf> (describing efforts by various jurisdictions to adopt standards for FMIs in line with the PFMI Report) ("PFMI Implementation Monitoring Report"); see also Reg. HH, *supra* note 50; Financial Market Utilities, 79 FR 3665 (Jan. 22, 2014) (the Board proposing to amend Reg. HH) ("proposed Reg. HH"); Policy on Payment System Risk, 79 FR 2838 (Jan. 16, 2014) (the Board proposing to amend its Federal Reserve Policy on Payments System Risk) ("proposed PSR Policy"); Derivatives Clearing Organizations and International Standards, 78 FR 72475 (Dec. 2, 2013) (CFTC adopting rules for DCOs

⁴⁰ As a member of the U.S. Federal Reserve System and a limited purpose trust company under New York State banking law, DTC is subject to regulation by the Board.

⁴¹ In addition, the Commission jointly regulates ICEEU, which is not currently designated as systemically important by the FSOC, with the CFTC and the Bank of England.

⁴² See Clearing Agency Standards Release, *supra* note 5.

⁴³ See *id.* at 66225, 66263–64.

⁴⁴ See Clearing Agency Standards Release, *supra* note 5, at 66225.

⁴⁵ Rules 17Ad-22(b)(1) through (4) contain several requirements that address risk management practices by registered clearing agencies that provide CCP services. Rules 17Ad-22(b)(5) through (7) establish certain requirements regarding access to registered clearing agencies that provide CCP services. Rule 17Ad-22(c) requires that a registered clearing agency providing CCP services calculate and maintain a record of its financial resources and requires each registered clearing agency to publish annual audited financial statements. Rule 17Ad-22(d) sets forth certain minimum standards for the operations of registered clearing agencies providing CCP or central securities depository ("CSD") services. See *infra* Part 0 (discussing the current requirements for CCPs under Rule 17Ad-22); see also Clearing Agency Standards Release, *supra* note 5 (adopting the existing standards under Rule 17Ad-22).

⁴⁶ See *supra* note 9 (describing the requirements under Section 17A(b)(3) of the Exchange Act, 15 U.S.C. 78q-1(b)(3)) and *infra* note 96 (further describing the Commission's framework for regulation of SROs and the SRO rule filing process).

⁴⁷ See, e.g., Exchange Act Release No. 34-44188 (Apr. 17, 2001), 66 FR 20494 (Apr. 23, 2001) (the Omgeo exemption); Exchange Act Release No. 34-39643 (Feb. 11, 1998), 63 FR 8232 (Feb. 18, 1998) (the Euroclear exemption); Exchange Act Release No. 34-38328 (Feb. 24, 1997), 62 FR 9225 (Feb. 28, 1997) (the Clearstream exemption).

⁴⁸ See *supra* note 36. In addition, the Basel Committee on Banking Supervision ("BCBS"), the international body that sets standards for the regulation of banks, published in July 2012 the *Capital Requirements for Bank Exposures to Central Counterparties* ("Basel III capital requirements"). The Basel III capital requirements set forth interim rules governing the capital charges arising from bank exposures to CCPs related to OTC derivatives, exchange-traded derivatives, and securities financing transactions (which term, as used throughout this release, refers generally to repurchase agreements and securities lending). Among other things, the Basel III framework imposes lower capital requirements on CCPs that obtain "qualifying CCP" ("QCCP") status and would apply QCCP status only to CCPs that are subject to a regulatory framework consistent with the standards set forth in the PFMI Report. See BCBS, *Capital Requirements for Bank Exposures to Central Counterparties* (July 2012), available at <http://www.bis.org/publ/bcbst227.pdf> (setting forth the interim requirements set forth in this report, currently under revision by the BCBS, in consultation with CPSS and IOSCO). See also BCBS, *Capital Treatment of Bank Exposures to Central Counterparties: Consultative Document* (rev. July 2013), available at <http://www.bis.org/publ/bcbst253.pdf>; BIS, *Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems* (rev. June 2011), available at <http://www.bis.org/publ/bcbst189.htm> ("Basel III framework"). The Basel III capital requirements are one component of the Basel III framework.

⁴⁹ See *supra* note 1.

The PFMI Report defines a "financial market infrastructure" ("FMI") as a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions. See *id.* at 7; FMIs include CCPs, CSDs, securities settlement systems ("SSSs"), and trade repositories ("TRs"). Cf. 12 U.S.C. 5462(b)(B), *supra* note 30 (defining "financial market utility" under the Clearing Supervision Act).

The PFMI Report presumes that all CSDs, SSSs, CCPs, and TRs are systemically important in their

proposals set forth below are a continuation of the Commission's active efforts to foster the development of the national clearance and settlement system.

II. Discussion of the Proposed Amendments to Rule 17Ad-22 and Proposed Rule 17Ab2-2

The Commission is proposing to amend Rule 17Ad-22 and add Rule 17Ab2-2 pursuant to Section 17A of the Exchange Act and the Clearing Supervision Act to provide a new regulatory framework for "covered clearing agencies," as defined below.

Generally, Section 17A directs the Commission to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of securities transactions, having due regard for the public interest, the protection of investors, the safeguarding of securities and funds, and the maintenance of fair competition among brokers and dealers.⁵⁴ It further requires that a clearing agency be so organized and have the capacity and rules designed to, among other things, facilitate the prompt and accurate clearance and settlement of securities transactions, and to comply with the provisions of the Exchange Act and the rules and regulations thereunder.⁵⁵ In establishing a regulatory framework for clearance and settlement, the Exchange Act requires that a registered clearing agency's rules not impose any burden on competition not necessary or

appropriate in the furtherance of the purposes of the Exchange Act.⁵⁶

Consistent with these statutory objectives, the Commission previously adopted Rule 17Ad-22(d) to establish minimum requirements for registered clearing agencies and indicated that it might consider further rulemaking at a later date.⁵⁷ In furtherance of the provisions of Section 17A of the Exchange Act and the Clearing Supervision Act described above and as previously considered by the Commission, the Commission is proposing Rule 17Ad-22(e) to establish new requirements for covered clearing agencies, which the Commission preliminarily believes are appropriate given the risks that their size, operation, and importance pose to the U.S. securities markets, the risks inherent in the products they clear, and the goals of Title VII and the Exchange Act.⁵⁸ In connection with its supervision of registered clearing agencies under Section 17A of the Exchange Act, including after the adoption of Rule 17Ad-22,⁵⁹ the Commission has considered whether enhanced requirements for covered clearing agencies could contribute to the stability of U.S. securities markets, as described further in Part IV, and has determined to issue this proposal for comment.

The Commission has preliminarily chosen to retain Rule 17Ad-22(d) and to continue to apply it to registered clearing agencies that are not covered clearing agencies.⁶⁰ The Commission preliminarily believes that retaining Rule 17Ad-22(d) ensures that clear, comprehensive, and transparent standards for registered clearing agencies that are not covered clearing agencies will continue to exist and, because they are narrower in scope, would thereby provide a more flexible regime for new entrants seeking to establish and operate registered clearing agencies, consistent with the continuing development of the national system for clearance and settlement, than would otherwise be the case with a single regime under proposed Rule 17Ad-22(e).

The Commission notes that it is not proposing to alter the existing requirements under Rule 17Ad-22(b), which establishes risk-management and participant access requirements for registered clearing agencies that perform CCP services for security-based swaps, or Rule 17Ad-22(c), which requires registered clearing agencies that provide CCP services to maintain a record of financial resources and all registered clearing agencies to post on their Web sites annual audited financial statements.⁶¹ These requirements continue to be appropriate for all registered clearing agencies because they promote prompt and accurate clearance and settlement of securities and security-based swap transactions. Notably, Rule 17Ad-22(b) reduces the likelihood, in a participant default scenario, that losses from default would disrupt the operations of the clearing agency, and Rule 17Ad-22(c) provides an additional layer of information about the activities and financial strength of a registered clearing agency that market participants may find useful in assessing their use of the registered clearing agency's services while also assisting the Commission in its oversight of registered clearing agencies' compliance with Rule 17Ad-22 by providing a clear record of the method used by the clearing agency to, among other things, maintain sufficient financial resources.⁶²

A. Overview

The Commission is proposing Rule 17Ad-22(e) to establish requirements for covered clearing agencies with respect to general organization,⁶³ financial risk management,⁶⁴ settlement,⁶⁵ CSDs and exchange-of-

in line with international standards) ("DCO Int'l Standards Release"); Enhanced Risk Management Standards for Systemically Important Derivatives Clearing Organizations, 78 FR 49663 (Aug. 15, 2013) (CFTC adopting rules for systemically important DCOs) ("SIDCO Release"); Derivatives Clearing Organization General Provisions and Core Principles, 76 FR 69334 (Nov. 8, 2011) (CFTC adopting rules for DCOs); ("DCO Principles Release").

In addition, the Board and the Office of the Comptroller of the Currency have adopted rules implementing the material elements of the BCBS interim framework for capitalization of bank exposures to CCPs. See Regulatory Capital Rules: Regulatory Capital, Implementation of Basel III, Capital Adequacy, Transition Provisions, Prompt Corrective Action, Standardized Approach for Risk-weighted Assets, Market Discipline and Disclosure Requirements, Advanced Approaches Risk-Based Capital Rule, and Market Risk Capital Rule, 76 FR 62017, 62099 (Oct. 11, 2013) ("Regulatory Capital Rules"). The Board also noted the ongoing international discussions on this topic and stated that it intends to revisit its rules once the Basel III capital framework is revised. See *id.* The Board and the Office of the Comptroller of the Currency's final rules define "QCCP" to mean, among other things, a designated FMU under the Clearing Supervision Act. See 12 CFR 217.2; see also Regulatory Capital Rules, *supra*, at 62100.

⁵⁴ See 15 U.S.C. 78q-(a)(2)(A).

⁵⁵ See 15 U.S.C. 78q-1(a)(3)(A), (F).

⁵⁶ See 15 U.S.C. 78q-1(b)(3)(I).

⁵⁷ See Clearing Agency Standards Release, *supra* note 5, at 66224-25.

⁵⁸ See *id.* (contemplating future Commission action on clearing agency standards).

⁵⁹ See Clearing Agency Standards Release, *supra* note 5, at 66227 (stating that Rule 17Ad-22 generally codifies existing practices that reflect the CPSS-IOSCO Recommendations published in 2001 and 2004).

⁶⁰ See *infra* Part 0 (discussing the proposed language amending Rule 17Ad-22(d) to apply to registered clearing agencies that are not covered clearing agencies).

⁶¹ The standards in Rules 17Ad-22(b) and (c) were also adopted by the Commission in 2012. See 17 CFR 240.17Ad-22(b), (c); see also Clearing Agency Standards Release, *supra* note 5.

The Commission is proposing to revise Rule 17Ad-22(a) to account for new proposed definitions. See proposed revision of Rule 17Ad-22(a), *infra* Part 0. The existing definitions in 17 CFR 240.17Ad-22(a) would be renumbered to account for new terms. In addition, the definition of "participant family" would be amended to include references to its use in proposed paragraphs (e)(4) and (e)(7). See proposed Rule 17Ad-22(a)(13), *infra* Part 0.

⁶² See Exchange Act Release No. 34-64017 (Mar. 3, 2011), 76 FR 14474, 14477-83 (Mar. 16, 2011); see also Clearing Agency Standards Release, *supra* note 5, at 66244.

⁶³ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(1) (legal risk), 17Ad-22(e)(2) (governance), and 17Ad-22(e)(3) (framework for the comprehensive management of risk)).

⁶⁴ See *infra* Part 0 (discussing proposed Rules 17Ad-22(e)(4) (credit risk), 17Ad-22(e)(5) (collateral), 17Ad-22(e)(6) (margin), and 17Ad-22(e)(7) (liquidity risk)).

⁶⁵ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(8) (settlement finality), 17Ad-22(e)(9)

value settlement systems,⁶⁶ default management,⁶⁷ general business risk and operational risk management,⁶⁸ access,⁶⁹ efficiency,⁷⁰ and transparency.⁷¹ The discussion below provides greater detail regarding each respective requirement in proposed Rule 17Ad-22(e). Several aspects of proposed Rule 17Ad-22(e) are similar to existing Rule 17Ad-22(d),⁷² but in general the Commission preliminarily notes that certain requirements under proposed Rule 17Ad-22(e) would require covered clearing agencies to consider and adopt policies and procedures more closely tailored to the risks that are posed by covered clearing agencies, which the Commission preliminarily identified as appropriate in connection with its experience in supervising registered clearing agencies under Section 17A of the Exchange Act, including since the adoption of Rule 17Ad-22.

The Commission preliminarily believes that the requirements of proposed Rule 17Ad-22(e) would help promote governance, operations, and risk management practices more closely tailored to the risks raised by registered clearing agencies that have been designated systemically important, are engaged in activities with a more complex risk profile, or are determined to be covered clearing agencies by the Commission, consistent with Section 17A of the Exchange Act. The Commission preliminarily believes these requirements would also enable consistent supervision of designated FMUs and would reflect the Commission's consideration of international standards, as contemplated by Section 17A(i) and the

(money settlements), and 17Ad-22(e)(10) (physical delivery risks)).

⁶⁶ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(11) (CSDs) and 17Ad-22(e)(12) (exchange-of-value settlement systems)).

⁶⁷ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(13) (participant-default rules and procedures), and 17Ad-22(e)(14) (segregation and portability)).

⁶⁸ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(15) (general business risk), 17Ad-22(e)(16) (custody and investment risk), and 17Ad-22(e)(17) (operational risk management)).

⁶⁹ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(18) (access and participation requirements), 17Ad-22(e)(19) (tiered participation arrangements), and 17Ad-22(e)(20) (links)).

⁷⁰ See *infra* Parts 0-0 (discussing proposed Rules 17Ad-22(e)(21) (efficiency and effectiveness) and 17Ad-22(e)(22) (communication procedures and standards)).

⁷¹ See *infra* Part 0 (discussing proposed Rule 17Ad-22(e)(23) (disclosure of rules, key procedures, and market data)).

⁷² See *infra* Part 0 (discussing the anticipated impact of proposed Rule 17Ad-22(e) given the existing requirements for registered clearing agencies under Rule 17Ad-22).

Clearing Supervision Act.⁷³ While the Commission has made its own determination to issue the proposed rules for comment, the Commission preliminarily believes that generally updating its rules, where appropriate, to take into account the standards set forth in the PFMI Report would contribute to the efforts of regulators around the world, described above,⁷⁴ to implement consistent standards for FMIs.⁷⁵ The Commission also preliminarily believes that Rule 17Ad-22(e) would provide an additional benefit of providing support for a determination by foreign bank regulators that covered clearing agencies providing CCP services for derivatives and securities financing transactions meet the requirements for QCCP status under the Basel III framework and could therefore help reduce competitive frictions among CCPs in different jurisdictions.

Part II.A first discusses the scope of proposed Rule 17Ad-22(e), the role that written policies and procedures play in framing the proposed rule, and the reasons for imposing certain frequency of review requirements throughout the proposed rules. It then discusses the anticipated impact of the proposed rules given the existing requirements applicable to registered clearing agencies under Rules 17Ad-22(b) through (d), with which a covered clearing agency must already be in compliance.

Part II.B next discusses the proposed rules under Rule 17Ad-22(e). Finally, Parts II.C, D, and E discuss, in turn, proposed Rule 17Ab2-2, proposed Rule 17Ad-22(f), and the proposed amendment to Rule 17Ad-22(d).

1. Scope of Proposed Rule 17Ad-22(e)

The Commission is proposing to add four terms to Rule 17Ad-22(a) to identify the registered clearing agencies that would be subject to proposed Rule 17Ad-22(e). First, the Commission is proposing to add Rule 17Ad-22(a)(9) to define "financial market utility" ("FMU") as defined in Section 803(6) of the Clearing Supervision Act.⁷⁶ Second, the Commission is proposing Rule

⁷³ See *supra* Part 0, in particular notes 36-37 and accompanying text (discussing the requirements under Section 17A(i) of the Exchange Act, 15 U.S.C. 78q-1(i), and Section 805(a) of the Clearing Supervision Act, 12 U.S.C. 5464(a)).

⁷⁴ See *supra* note 53 and accompanying text.

⁷⁵ See *infra* Part 0 (further discussing the economic effects of obtaining QCCP status under the Basel III capital requirements); see also *supra* note 48.

⁷⁶ See proposed Rule 17Ad-22(a)(9), *infra* Part 0; see also 12 U.S.C. 5462(6) (defining "financial market utility" pursuant to the Clearing Supervision Act); *supra* note 26 (providing further explanation of "financial market utility").

17Ad-22(a)(8) to define "designated clearing agency."⁷⁷ A designated clearing agency would mean a clearing agency registered with the Commission under Section 17A of the Exchange Act that has been designated as a systemically important FMU by the FSOC and for which the Commission is the supervisory agency as defined in Section 803(8) of the Clearing Supervision Act.⁷⁸ Third, the Commission is proposing to add Rule 17Ad-22(a)(4) to define "clearing agency involved in activities with a more complex risk profile"⁷⁹ to mean a clearing agency registered with the Commission under Section 17A of the Exchange Act that either (i) provides central counterparty services for security-based swaps or (ii) has been determined by the Commission to be involved in activities with a more complex risk profile ("complex risk profile clearing agency"), either at the time of its initial registration or upon a subsequent determination by the Commission pursuant to proposed Rule 17Ab2-2.⁸⁰ Fourth, the Commission is proposing to add Rule 17Ad-22(a)(7) to define a "covered clearing agency" as a designated clearing agency, a complex risk profile clearing agency, or any clearing agency determined to be a covered clearing agency by the Commission pursuant to proposed Rule 17Ab2-2.⁸¹

The Commission preliminarily believes there could be several different bases under which registered clearing agencies would be required to comply with proposed Rule 17Ad-22(e). For instance, because DTC, FICC, NSCC, and OCC are registered clearing agencies pursuant to Section 17A of the Exchange Act and are designated clearing agencies for which the Commission is the supervisory agency under the Clearing Supervision Act,⁸²

⁷⁷ See proposed Rule 17Ad-22(a)(8), *infra* Part 0.

⁷⁸ Rule 17Ad-22 does not currently apply to entities operating pursuant to an exemption from clearing agency registration. The proposed amendments to Rule 17Ad-22 would not broaden the scope of Rule 17Ad-22 to an entity operating pursuant to an exemption from registration as a clearing agency granted by the Commission.

⁷⁹ See proposed Rule 17Ad-22(a)(4), *infra* Part 0.

⁸⁰ The Commission is proposing Rule 17Ab2-2 to establish a process for making determinations regarding clearing agencies involved in activities with a more complex risk profile. See *infra* Part 0 (further discussing the purpose, scope, and application of proposed Rule 17Ab2-2) and Part 0 (proposed text of Rule 17Ab2-2).

The Commission is also proposing Rule 17Ad-22(a)(16) to define "security-based swap" to mean security-based swap as defined in Section 3(a)(68) of the Exchange Act, 15 U.S.C. 78c(a)(68). See *infra* Part 0.

⁸¹ See proposed Rule 17Ad-22(a)(4), *infra* Part 0.

⁸² See *supra* Part 0.

they would be covered clearing agencies under proposed Rule 17Ad-22(a)(7) and would be subject to the requirements for covered clearing agencies in proposed Rule 17Ad-22(e). In addition, because ICEEU provides CCP services for security-based swaps and has been deemed registered with the Commission as a security-based swap clearing agency,⁸³ it would be a complex risk profile clearing agency under proposed Rule 17Ad-22(a)(4) and also subject to the requirements for covered clearing agencies proposed in Rule 17Ad-22(e).

By comparison, CME and ICE would not be subject to the proposed requirements for covered clearing agencies in Rule 17Ad-22(e) because (i) they have been designated as systemically important FMUs under Section 804 of the Clearing Supervision Act;⁸⁴ (ii) they are each dually registered with the Commission and the CFTC as a clearing agency and DCO, respectively; and (iii) the CFTC is their supervisory agency under the Clearing Supervision Act.⁸⁵ The Commission preliminarily believes that, because CME and ICE would be subject to the CFTC's requirements for systemically important DCOs,⁸⁶ applying proposed Rule 17Ad-22(e) to them could impose duplicative requirements. Given the Commission's existing regulatory authority under Section 17A(l) of the Exchange Act,⁸⁷ however, CME and ICE would remain subject to the continuing requirements for registered clearing agencies in Rules 17Ad-22(b) through (d).

Two dormant clearing agencies, the Stock Clearing Corporation of Philadelphia ("SCCP") and the Boston Stock Exchange Clearing Corporation ("BSECC"), have not been designated systemically important by the FSOC and are not involved in activities with a more complex risk profile.⁸⁸ Accordingly, each would also remain

subject to the requirements in Rules 17Ad-22(b) through (d).

Further, proposed Rule 17Ab2-2 would provide the Commission flexibility to determine that the operations or circumstances of a registered clearing agency, including a registered clearing agency that is exempt from certain requirements applicable to registered clearing agencies generally, warrant designation as a covered clearing agency.⁸⁹ It would also provide flexibility to make determinations regarding newly registered clearing agencies.

The Commission preliminarily believes the requirements proposed in Rule 17Ad-22(e) aid the regulation of covered clearing agencies by, as noted above, establishing requirements more closely tailored to the risks they pose to the U.S. securities markets. For example, designated clearing agencies are systemically important because of their significance to the U.S. financial system and the risk that the failure of, or a disruption to, their functioning would increase the risk of significant liquidity or credit problems spreading among financial institutions, thereby threatening the stability of the U.S. financial system.⁹⁰ Similarly, the Commission preliminarily believes that complex risk profile clearing agencies, such as those providing CCP services for security-based swaps, subject the U.S. securities markets to a material level of systemic risk due to the nature of the products that they clear.⁹¹ The requirements proposed in Rule 17Ad-22(e) are intended to ensure that covered clearing agencies have robust policies and procedures that help promote sound governance, operations, and risk management.

As noted above,⁹² the Commission preliminarily believes that establishing separate rules for covered clearing agencies and registered clearing agencies that are not covered clearing agencies is appropriate given the Commission's goals to facilitate the development of a national system for the prompt and accurate clearance and settlement of securities consistent with Section 17A of the Exchange Act and to mitigate systemic risk consistent with Titles VII and VIII of the Dodd-Frank

Act.⁹³ In this regard, the Commission intends that Rule 17Ad-22(d) would continue to provide minimum requirements for the operation and governance of registered clearing agencies that also facilitate the entrance of new participants, as appropriate, into the market for clearance and settlement services.⁹⁴ The Commission preliminarily believes that Rule 17Ad-22(e) would establish new requirements for established participants in the market for clearance and settlement services commensurate to the risks that their size, operation, and importance pose to the U.S. securities markets.⁹⁵

Request for Comments. The Commission generally requests comments on all aspects of the scope of proposed Rule 17Ad-22(e), the relationship between proposed Rule 17Ad-22(e) and Rule 17Ad-22(d), and on proposed Rules 17Ad-22(a)(4), (7), (8), and (9). In addition, the Commission requests comments on the following specific issues:

- Is the scope of proposed Rule 17Ad-22(e) appropriate? Why or why not? Is the scope sufficiently clear? Why or why not? Has the Commission provided sufficient guidance regarding the scope of the proposed rule? Are there aspects of the scope of the proposed rule for which the Commission should consider providing additional guidance? If so, please explain.

- Given that all non-dormant registered clearing agencies would either be covered clearing agencies subject to Commission supervision or be subject to CFTC regulation as designated clearing entities for which the CFTC is the supervisory agency, should the Commission replace the existing requirements under Rule 17Ad-22(d) with the requirements proposed under Rule 17Ad-22(e)? Why or why not?

- Is the Commission's proposed definition of "financial market utility" appropriate and sufficiently clear given the proposed requirements? Why or why not? Should the definition be modified? If so, how? Is there an

⁸³ See *supra* note 41 and accompanying text.

⁸⁴ See 12 U.S.C. 5463.

⁸⁵ See *supra* Part 0; see also FSOC, 2013 Annual Report, *supra* note 39, at 100.

⁸⁶ See *supra* note 41 and accompanying text.

⁸⁷ See 15 U.S.C. 78q-1(l).

⁸⁸ In 2008, NASDAQ OMX Group, Inc. acquired SCCP and BSECC. See Exchange Act Release No. 34-58324 (Aug. 7, 2008), 73 FR 46936 (Aug. 12, 2008) (order approving acquisition of BSECC); Exchange Act Release No. 34-58180 (July 17, 2008), 73 FR 42890 (July 23, 2008) (order approving acquisition of SCCP).

Both SCCP and BSECC are currently registered with the Commission as clearing agencies but conduct no clearing or settlement activities. See Exchange Act Release No. 34-63629 (Jan. 3, 2011), 76 FR 1473 (Jan. 10, 2011); Exchange Act Release No. 34-63268 (Nov. 8, 2010), 75 FR 69730 (Nov. 15, 2010).

⁸⁹ See *infra* Parts 0 and 0 (discussing determinations under proposed Rule 17Ab2-2 and providing rule text, respectively).

⁹⁰ See *supra* note 27 and accompanying text.

⁹¹ See generally Gov't Accountability Office, Systemic Risk: Regulatory Oversight and Recent Initiatives to Address Risk Posed by Credit Default Swaps (Mar. 2009), available at <http://www.gao.gov/new.items/d09397t.pdf>.

⁹² See *supra* notes 54-61 and accompanying text.

⁹³ See *supra* notes 2, 13-14, and accompanying text (noting the goals of, respectively, Section 17A of the Exchange Act and the Dodd-Frank Act).

⁹⁴ See *supra* note 43 and accompanying text (noting the Commission's intent in adopting Rule 17Ad-22 in the Clearing Agency Standards Release).

⁹⁵ See *supra* note 44 and accompanying text (noting further that the requirements adopted under Rule 17Ad-22 constituted an important first step to enhance the substantive regulation of registered clearing agencies pursuant to the Dodd-Frank Act); see also *infra* Part 0 (addressing systemic risk in the context of discussing the general economic considerations undertaken by the Commission in proposing Rule 17Ad-22(e)).

alternative definition the Commission should consider?

- Is the Commission's proposed definition of "designated clearing agency" appropriate and sufficiently clear given the requirements proposed? Why or why not? Should the definition be modified? If so, how? Is there an alternative definition the Commission should consider?
- Is the Commission's proposed definition of "clearing agency involved in activities with a more complex risk profile" appropriate and sufficiently clear given the requirements proposed? Why or why not? Should the definition be modified? If so, how? Is there an alternative definition the Commission should consider?
- Is the Commission's proposed definition of "covered clearing agency" appropriate and sufficiently clear given the requirements proposed? Why or why not? Should the definition be modified? If so, how? Is there an alternative definition the Commission should consider?
- Are the requirements in proposed Rule 17Ad-22(e) necessary, or do the existing provisions in Rule 17Ad-22(d) already sufficiently address the issues identified in this release as justification for increased regulation?

2. Role of Written Policies and Procedures

Proposed Rule 17Ad-22(e) would require covered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to, as applicable, fulfill the requirements set forth in paragraphs (e)(1) through (23) of the proposed rule. The Commission preliminarily believes that this approach would facilitate the Commission's supervision of covered clearing agencies, is appropriate given their role as SROs,⁹⁶ and is consistent with the approach taken by the Commission elsewhere in Rule 17Ad-22.⁹⁷ The Commission preliminarily believes that, by requiring written policies and procedures and, where appropriate, their disclosure, proposed Rule 17Ad-22(e) should help promote

the development of improved standards for clearing agencies by allowing market participants to compare certain of the operations of covered clearing agencies with those of other clearing entities, which choose to make their policies and procedures publicly available or are required to do so by equivalent regulatory standards.⁹⁸

The Commission is proposing to require policies and procedures developed by each covered clearing agency to fulfill the requirements of proposed Rule 17Ad-22(e) because the Commission preliminarily believes that it is important to allow covered clearing agencies enough flexibility to use their market experience and understanding of their institutions to shape the rules, policies, and procedures implementing proposed Rule 17Ad-22(e). This proposed approach is consistent with the Commission's established approach for supervising SROs, and the Commission preliminarily believes continuing this practice under Rule 17Ad-22(e) will allow the Commission to continue to perform its supervisory function through the SRO rule filing process under Section 19(b) of the Exchange Act and Rule 19b-4,⁹⁹ periodic inspections and examinations, other monitoring of the activities of registered clearing agencies, and other established supervisory processes. Because of the importance the Commission gives to both maintaining clearing agency flexibility and to existing oversight mechanisms, the Commission preliminarily believes that the proposed approach is appropriate.

The Commission anticipates that a covered clearing agency's rules, policies, and procedures will need to evolve over time so that it can adequately respond to changes in technology, legal requirements, the needs of its members and their customers, trading volumes, trading practices, linkages between financial markets, and the financial instruments traded in the markets that a covered clearing agency serves. Accordingly, the Commission preliminarily believes that covered clearing agencies should continually evaluate and make appropriate updates and improvements

to their operations and risk management practices to facilitate prompt and accurate clearance and settlement.

3. Frequency of Review Required Under Certain Policies and Procedures

Many of the policies and procedures requirements proposed in Rule 17Ad-22(e) specify a frequency of review. Generally, the proposed regularity of review falls into three categories—daily, monthly, or annually—and is based on the Commission's understanding of the current review practices generally at covered clearing agencies. The Commission's rationale for these differences is as follows:

- **Daily:** For those activities that the Commission understands to be directly related to the day-to-day operations of a covered clearing agency,¹⁰⁰ such as activities related to the calculation and collection of margin, the Commission preliminarily believes that a covered clearing agency should undertake a daily review and make decisions on a daily basis;
- **Monthly:** For those activities that the Commission understands to coincide with and complement the review and reporting cycles of the governance structures related to the risk management function of the covered clearing agency,¹⁰¹ the Commission preliminarily believes that a covered clearing agency should undertake a monthly review; based on its supervisory experience, the Commission notes that well-functioning risk management committees of the board and similar management committees or other board or management committees commonly meet or receive reports and other risk management information from management on a monthly basis and the monthly requirement would be consistent with such meeting and reporting frequency;
- **Annually:** For those activities that are less integral to day-to-day operations, involve issues that merit review of information collected over longer time periods, or require more high-level review and consideration by, for example, the full board of directors of a clearing agency,¹⁰² the Commission

⁹⁶ Registered clearing agencies are SROs as defined in Section 3(a)(26) of the Exchange Act, 15 U.S.C. 78c(a)(26). After a clearing agency has been registered with the Commission, the clearing agency, as an SRO, must submit most proposed rule changes to the Commission, for approval pursuant to Rule 19b-4 under the Exchange Act. A stated policy, practice, or interpretation of an SRO, such as a clearing agency's written policies and procedures, would generally be deemed to be a proposed rule change. See 17 CFR 240.19b-4.

⁹⁷ See Clearing Agency Standards Release, *supra* note 5, at 66228-29 (describing the scope of Rule 17Ad-22 at adoption).

⁹⁸ Compare proposed Rule 17Ad-22(e)(23), *infra* Part 0 (requiring public disclosure of, among other things, a covered clearing agency's rules, policies, and procedures) with proposed Reg. HH, *supra* note 53, at 3666-67, 3686-88, 3693 (the Board proposing disclosure requirements intended to be in line with the PFMI Report in Sec. 234.3(a)(23)); DCO Int'l Standards Release, *supra* note 53, at 72493-94, 72521 (CFTC adopting disclosure requirements intended to be in line with the PFMI Report in Sec. 39.37).

⁹⁹ See *supra* note 96 (describing requirements for SROs under the Exchange Act and Rule 19b-4).

¹⁰⁰ See proposed Rules 17Ad-22(e)(4)(vi)(A); 17Ad-22(e)(6)(ii); 17Ad-22(e)(6)(vi)(A); 17Ad-22(e)(7); 17Ad-22(e)(7)(vi)(A); and 17Ad-22(e)(11)(ii), *infra* Part 0.

¹⁰¹ See proposed Rules 17Ad-22(e)(4)(vi)(B); 17Ad-22(e)(4)(vi)(C); 17Ad-22(e)(6)(vi)(B); 17Ad-22(e)(6)(vi)(C); 17Ad-22(e)(7)(vi)(B); and 17Ad-22(e)(7)(vi)(C), *infra* Part 0.

¹⁰² See proposed Rules 17Ad-22(e)(3)(i); 17Ad-22(e)(4)(vii); 17Ad-22(e)(5); 17Ad-22(e)(6)(vii); 17Ad-22(e)(7)(v); 17Ad-22(e)(7)(vii); 17Ad-22(e)(7)(x); 17Ad-22(e)(13)(iii); and 17Ad-22(e)(15)(iii), *infra* Part 0.

preliminarily believes that a covered clearing agency should undertake an annual review; additionally, the Commission preliminarily believes that an annual cycle is appropriate in certain instances because other major reviews such as auditing of the financial statements of registered clearing agencies and their disclosure are required to occur on an annual basis.

Request for Comments. The Commission generally requests comments on all aspects of the frequency of review that would be required to be included in a covered clearing agency's policies and procedures under each of the requirements in proposed Rule 17Ad-22(e). In addition, the Commission requests comments on whether its

assessment of daily, monthly, and annual activities at covered clearing agencies is accurate and appropriate given the proposed rules. The Commission also requests comment on what factors should be considered in determining the nature, timing, and extent of the required reviews and whether other frequencies of review might be appropriate under some or all of the proposed rules.

4. Anticipated Impact of Proposed Rule 17Ad-22(e)

Based on the Commission's experience supervising registered clearing agencies, and given the current requirements applicable to registered clearing agencies under Rule 17Ad-22, the Commission preliminarily

anticipates that the degree of changes that covered clearing agencies may need to make to their policies and procedures to satisfy the proposed requirements of Rule 17Ad-22(e) would vary among the particular provisions of the proposed rule and depend in part on the business model and operations of the clearing agency itself, as discussed below. The Commission preliminarily believes that, for the provisions in its proposal where a similar existing requirement has been identified, covered clearing agencies may need to make only limited changes to update their policies and procedures, and the table below provides summary information regarding the Commission's preliminary assessment of the impact of the proposed rules:

Proposed requirement	Existing requirement
Rule 17Ad-22(e)(1)	Rule 17Ad-22(d)(1).
Rule 17Ad-22(e)(2)	Rule 17Ad-22(d)(8).
Rule 17Ad-22(e)(3)	None.
Rule 17Ad-22(e)(4)	Rules 17Ad-22(b)(1), (b)(3), (d)(14). ¹⁰³
Rule 17Ad-22(e)(5)	None.
Rule 17Ad-22(e)(6)	Rules 17Ad-22(b)(2), (b)(4). ¹⁰⁴
Rule 17Ad-22(e)(7)	None.
Rule 17Ad-22(e)(8)	Rule 17Ad-22(d)(12).
Rule 17Ad-22(e)(9)	Rule 17Ad-22(d)(5).
Rule 17Ad-22(e)(10)	Rule 17Ad-22(d)(15).
Rule 17Ad-22(e)(11)	Rule 17Ad-22(d)(10).
Rule 17Ad-22(e)(12)	Rule 17Ad-22(d)(13).
Rule 17Ad-22(e)(13)	Rule 17Ad-22(d)(11).
Rule 17Ad-22(e)(14)	None.
Rule 17Ad-22(e)(15)	None.
Rule 17Ad-22(e)(16)	Rule 17Ad-22(d)(3).
Rule 17Ad-22(e)(17)	Rule 17Ad-22(d)(4).
Rule 17Ad-22(e)(18)	Rules 17Ad-22(b)(5) through (7), (d)(2).
Rule 17Ad-22(e)(19)	None.
Rule 17Ad-22(e)(20)	Rule 17Ad-22(d)(7).
Rule 17Ad-22(e)(21)	Rule 17Ad-22(d)(6).
Rule 17Ad-22(e)(22)	None.
Rule 17Ad-22(e)(23)	Rule 17Ad-22(d)(9).

With respect to the provisions in its proposal where no similar existing

¹⁰³ The Commission notes that requirements under Rules 17Ad-22(b) apply only to registered clearing agencies that provide CCP services, the "cover two" requirement under Rule 17Ad-22(b)(3) applies only to registered clearing agencies that provide CCP services for security-based swaps, and requirements under Rule 17Ad-22(d)(14) apply only to registered clearing agencies that provide CSD services. See *infra* Part 0 (discussing, among other things, the relationship between existing requirements under Rule 17Ad-22 and proposed Rule 17Ad-22(e)(4)); see also 17 CFR 240.17Ad-22; Clearing Agency Standards Release, *supra* note 5.

¹⁰⁴ The Commission notes that the relevant requirement in Rule 17Ad-22(b)(4) concerns policies and procedures regarding an annual model validation for margin models while proposed Rule 17Ad-22(e)(6) would impose, in addition to requiring policies and procedures regarding an annual model validation for margin models, additional requirements that do not appear in Rule 17Ad-22(b)(4). See *infra* Part 0 (discussing the requirements under proposed Rule 17Ad-22(e)(6)).

requirement has been identified, the Commission preliminarily anticipates that covered clearing agencies may need to make more extensive changes to their policies and procedures (or implement new policies and procedures), and may need to take other steps, to satisfy the proposed requirements of Rule 17Ad-22(e).

For further discussion of the anticipated impact and costs and benefits of proposed Rule 17Ad-22(e), see Part IV.C.

5. General Request for Comments

The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e) and on all aspects of the definitions included in proposed Rule 17Ad-22(a), as discussed in more

detail in Part II.B.¹⁰⁵ In addition, the Commission requests comments on the following issues:

- Is each aspect of proposed Rules 17Ad-22(e)(1) through (23), including any terms used therein, sufficiently clear given the proposed requirements? Why or why not? Has the Commission provided sufficient guidance as to the meaning of each provision of the proposed rules? Are there aspects of the proposed rules for which the Commission should consider providing additional guidance? If so, please explain.

- Are the Commission's definitions in proposed Rule 17Ad-22(a) accurate, appropriate, and sufficiently clear? Why or why not? Should the definitions be

¹⁰⁵ Part 0 also contains additional requests for comments on each proposed rule regarding particular issues specific to each proposed rule.

modified? If so, how? Should the Commission adopt alternative definitions than those proposed? Are there additional terms used in Rule 17Ad-22(e) that should be defined? Please explain.

- Is the Commission's use of certain terms it believes to be commonly understood (e.g., "high degree of confidence" or "due diligence") appropriate and accurate? Why or why not?

- Would the proposed rules require covered clearing agencies to change their current practices? If so, how? What are the expected costs and benefits to covered clearing agencies in connection with adding or revising their current practices with respect to the implementation of the Commission's proposed rules?¹⁰⁶

- Should the Commission consider an alternative approach with respect to written policies and procedures included in the proposed rules? Why or why not? If so, what alternative approaches should the Commission consider? Please explain in detail.

- Should the Commission's proposed rules be less or more prescriptive? Why or why not? If so, what alternative approaches should the Commission consider? Please explain in detail.

- Are there any other factors that the Commission should take into consideration with respect to the requirements of the proposed rules?

- Should there be a phase-in period with respect to any of the requirements of proposed Rule 17Ad-22(e)? If so, what should the phase-in periods be? What facts and circumstances should the Commission consider in evaluating whether to adopt a potential phase-in period? Please explain in detail.

- Could the proposed rules affect the ability of covered clearing agencies to compete for certain types of business either within the United States or internationally? If so, how? Please provide specific examples and data.

- Are there significant operational or legal impediments to implementing the proposed rules? Would the proposed rules impact the ability of covered clearing agencies to clear certain products? Are any additional rules or regulations needed to facilitate compliance with the proposed rules?

- Are there any requirements under existing Rule 17Ad-22 that could be viewed as being consistent with the PFMI standards without being supplemented or replaced by new requirements in proposed Rule 17Ad-22(e)? Please explain in detail.

¹⁰⁶ For a complete discussion of the anticipated economic effect of the proposed rules, see Part 0.

B. Proposed Rule 17Ad-22(e)

1. Proposed Rule 17Ad-22(e)(1): Legal Risk

Proposed Rule 17Ad-22(e)(1) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a well-founded, clear, transparent, and enforceable legal basis for each aspect of its activities in all relevant jurisdictions.¹⁰⁷ Rule 17Ad-22(d)(1) currently requires a registered clearing agency's policies and procedures to meet substantially the same requirement.¹⁰⁸ Because the requirements under Rule 17Ad-22(d)(1) and proposed Rule 17Ad-22(e)(1) are substantially the same, the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures to comply with the proposed rule.¹⁰⁹

Consistent with the Exchange Act requirements discussed above,¹¹⁰ the Commission is proposing Rule 17Ad-22(e)(1) to require that a covered clearing agency have a legal basis for each aspect of its activities in all relevant jurisdictions. The legal framework for a particular clearing agency may cover a broad array of areas and issues, in particular including but not limited to its (i) organizational and governance documents, such as its charter, bylaws, and any charters for board and management committees;¹¹¹

¹⁰⁷ See proposed Rule 17Ad-22(e)(1), *infra* Part 0.

The Commission preliminarily believes that (i) the United States is the relevant jurisdiction for covered clearing agencies that perform the functions of a clearing agency in the United States for purposes of Rule 17Ad-22(e)(1), and (ii) that covered clearing agencies operating in multiple jurisdictions would be required to address any conflicts of laws issues that they may encounter.

¹⁰⁸ Rule 17Ad-22(d)(1) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a well-founded, transparent, and enforceable legal framework for each aspect of its activities in all relevant jurisdictions. See 17 CFR 240.17Ad-22(d)(1); see also Clearing Agency Standards Release, *supra* note 5, at 66245-46.

¹⁰⁹ See *supra* Part 0.

¹¹⁰ See notes 54-56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

¹¹¹ The role of governance arrangements in promoting effective risk management has also been a focus of rules proposed by the Commission to mitigate conflicts of interest at certain registered clearing agencies. See Exchange Act Release No. 34-64017 (Mar. 3, 2011), 76 FR 14472 (Mar. 16, 2011) (proposing Rule 17Ad-23 to address conflicts of interest and Rule 17Ad-26 to require standards for board members or board committee directors at registered clearing agencies); Exchange Act Release No. 34-63107 (Oct. 14, 2010), 75 FR 65881, 65893 (Oct. 26, 2010) (proposing Regulation MC to

(ii) rules, policies, and procedures,¹¹² including those regarding settlement finality, netting,¹¹³ default of a member, margin, collateral,¹¹⁴ payments, obligations to the participant or default fund, eligibility and participation requirements for members, and recovery and wind-down plans; (iii) contracts (notably including with service providers, settlement banks and liquidity providers); (vi) its use of novation or similar legal devices;¹¹⁵ and (vii) service restrictions that may be imposed on participants such as restrictions on activities or access.

In addition, the Commission is proposing to add Rule 17Ad-22(a)(20) to define "transparent" to mean, for proposed Rules 17Ad-22(e)(1), (2), and (10), that relevant documentation is disclosed, as appropriate, to the Commission and other relevant authorities, clearing members and customers of clearing members, the owners of the covered clearing agency, and the public, to the extent consistent with other statutory and Commission requirements.¹¹⁶ In proposing this

mitigate conflicts of interest at security-based swap clearing agencies).

¹¹² See *supra* note 96 (describing the requirements in Section 19(b) of the Exchange Act).

¹¹³ Netting offsets obligations between or among participants in the netting arrangement, thereby reducing the number and value of payments or deliveries needed to settle a set of transactions. Netting can reduce potential losses in the event of a participant default and may reduce the probability of a default. Netting arrangements can differ as to both timing and the parties to the arrangement: (i) Certain netting arrangements net payments or other contractual obligations resulting from market trades (or both) on a continuous basis, while others close-out payments or obligations when an event such as insolvency occurs; and (ii) netting arrangement may net obligations bilaterally among two parties or multilaterally among multiple parties.

¹¹⁴ Collateral arrangements may involve either a pledge or a title transfer. Therefore, regarding pledged assets, a covered clearing agency would examine the degree of legal certainty that a pledge has been validly created in the relevant jurisdiction and, as appropriate, validly perfected. Regarding transfer of title to assets, a covered clearing agency would examine the degree of legal certainty that the transfer is validly created in the relevant jurisdiction and will be enforced.

¹¹⁵ Novation enables a clearing agency to act as a CCP. In novation, the original contract between the buyer and seller is discharged and two new contracts are created, one between the CCP and the buyer and the other between the CCP and the seller. The CCP thereby assumes the original parties' contractual obligations to each other. Legal certainty regarding novation may reinforce market participants' confidence regarding CCP support for or guarantee of the transaction.

¹¹⁶ See proposed Rule 17Ad-22(a)(20), *infra* Part 0; see also Parts 0 and 0 (discussing proposed Rules 17Ad-22(e)(2) and (10), respectively).

Separately, the Commission has proposed rules to require policies and procedures to protect the confidentiality of trading information and procedures. See Exchange Act Release No. 34-64017 (Mar. 3, 2011), 76 FR 14472 (Mar. 16, 2011) (proposing Rule 17Ad-23).

definition, the Commission recognizes that certain types of information, such as confidential information, may not be appropriate for public disclosure or disclosure to certain third parties. Confidential information might include, for instance, policies and procedures with respect to the security of information technology or other critical systems or governance arrangements relating to the creation of special advisory committees by the board of directors. With regard to public disclosures contemplated by proposed Rule 17Ad-22(a)(20), a covered clearing agency could comply with the proposed requirement by posting the relevant documentation to a covered clearing agency's Web site. The Commission preliminarily believes that these disclosures would support a participant's ability to evaluate the risks associated with participating in the covered clearing agency. For example, disclosures that facilitate market participants' understanding of the legal basis for a covered clearing agency's activities and its governance arrangements may encourage participation in the covered clearing agency (with respect to prospective clearing members) and may encourage trading in the United States that would result in clearance and settlement through the covered clearing agency (with respect to prospective investors).

As was the case when the Commission considered Rule 17Ad-22(d)(1), where a clearing agency is faced with significant uncertainty regarding legal risk, the Commission preliminarily believes this uncertainty may undermine a covered clearing agency's ability to provide prompt and accurate clearance and settlement, to safeguard securities and funds and to provide fair procedures, as required under Section 17A of the Exchange Act. For example, where a covered clearing agency's procedures addressing a participant default and establishing a security interest in collateral lack clarity or there is significant uncertainty regarding enforceability, there is a risk the clearing agency may face claims to void, stay or reverse its actions, which could be made by a bankruptcy trustee or other type of receiver in an insolvency of a participant, undermining the clearing agency's ability to safeguard securities and funds. As a similar example, if covered clearing agency netting activities are voided or reversed on legal grounds, which could involve a participant's insolvency, clearing and settlement could be disrupted as participant accounts are rebalanced. Also, for

example, if a covered clearing agency's plan for recovery and wind-down is subject to legal uncertainty, the covered clearing agency or governmental authorities may be delayed in or prevented from taking appropriate actions, resulting in disorder that may undermine the provision of prompt and accurate clearance and settlement.¹¹⁷

Therefore, like Rule 17Ad-22(d)(1), the Commission preliminarily believes that proposed Rule 17Ad-22(e)(1) would support the effectiveness of a covered clearing agency's risk management procedures in two ways. First, by imposing requirements addressing legal risk, it would continue to promote effective risk management at covered clearing agencies. Second, the proposed rule would reinforce covered clearing agency policies and procedures regarding risks other than legal risk, including, among others, credit, liquidity, operational, and general business risk.¹¹⁸

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(1) and proposed Rule 17Ad-22(a)(20). In addition, the Commission requests comments on the following specific issues:

- Should the proposed rule include more specific requirements based on the type of business or the types of services offered by covered clearing agencies and/or whether the covered clearing agency operates in multiple jurisdictions? If so, are there any considerations, such as those concerning compliance with regulations in other jurisdictions, the Commission should take into account for covered clearing agencies operating in multiple jurisdictions?

- Should the Commission adopt more prescriptive or less prescriptive rules to define how covered clearing agencies would provide for a well-founded, clear, transparent, and enforceable legal basis? Why or why not? If so, what would those rules be?

- Should the Commission require a covered clearing agency to maintain documentation to demonstrate the legal adequacy of the mechanisms at the clearing agency that are in place to handle participant defaults? If so, what kinds of documentation should the Commission require?

- In proposing Rule 17Ad-22(a)(20), has the Commission taken the right approach with respect to requiring

¹¹⁷ Issues addressed in such wind-down plans may include termination, netting, and the transfer of securities positions and assets.

¹¹⁸ Cf. PFMI Report, *supra* note 1, at 21–25 (discussing Principle 1, legal basis).

public disclosures? Why or why not? Should the Commission adopt rules that would require either more or less disclosure? Why or why not?

- What should be the minimum level of public disclosure required of a covered clearing agency? What information should a covered clearing agency be permitted to withhold? What form should that disclosure take? What content should be required? Please explain in detail.

2. Proposed Rule 17Ad-22(e)(2): Governance

Proposed Rules 17Ad-22(e)(2)(i) through (iv) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for governance arrangements that are clear and transparent, clearly prioritize the safety and efficiency of the covered clearing agency, and support the public interest requirements in Section 17A of the Exchange Act and the objectives of owners and participants.¹¹⁹ The proposed rule contains requirements similar to those currently applicable to registered clearing agencies under Rule 17Ad-22(d)(8), but the proposed rule also requires that a covered clearing agency's policies and procedures provide for governance arrangements that clearly prioritize the safety and efficiency of the covered clearing agency.¹²⁰

Governance arrangements are critical to the sound operation of SROs, including covered clearing agencies.¹²¹ The Exchange Act explicitly conditions clearing agency registration on a clearing agency having rules that (i) assure a fair representation of shareholders or members and participants in the selection of its directors and administration of affairs, (ii) facilitate prompt and accurate

¹¹⁹ See proposed Rule 17Ad-22(e)(2), *infra* Part 0. Proposed Rule 17Ad-22(e)(2) would complement other requirements that may apply separately, including requirements in proposed Rules 17Ad-25 and 17Ad-26, and requirements for security-based swap clearing agencies under Section 765 of the Dodd-Frank Act, 12 U.S.C. 8343. See *supra* note 111 (noting rules proposed by the Commission to address potential conflicts of interest).

¹²⁰ Specifically, Rule 17Ad-22(d)(8) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to have governance arrangements that are clear and transparent to fulfill the public interest requirements in Section 17A of the Exchange Act applicable to clearing agencies, to support the objectives of owners and participants, and to promote the effectiveness of the clearing agency's risk management procedures. See 17 CFR 240.17Ad-22(d)(8); see also Clearing Agency Standards Release, *supra* note 5, at 66251–52.

¹²¹ See *supra* Part 0 and note 96 (describing the Commission's framework for regulation of SROs and the SRO rule filing process).

clearance and settlement, (iii) protect investors and the public interest, (iv) do not permit unfair discrimination in the use of the clearing agency by participants and (v) provide certain fair procedures regarding participants and other interested parties.¹²² Accordingly, the proper functioning of registered clearing agencies pursuant to the requirements of the Exchange Act is premised on the existence of a well-organized and operating governance function.

Consistent with these requirements and the Exchange Act requirements discussed above,¹²³ the Commission preliminarily believes that the governance requirements proposed in Rule 17Ad-22(e)(2) are appropriate because governance arrangements are fundamental to the functioning of a covered clearing agency pursuant to Section 17A of the Exchange Act.¹²⁴ Consistent with the Commission's statutory mandate under the Exchange Act, the proposed rule would specify that governance arrangements also be consistent with the public interest requirements in Section 17A of the Exchange Act as applicable to clearing agencies. Because a covered clearing agency's decisions can have widespread impact, affecting multiple market participants, financial institutions, markets, and jurisdictions, the Commission preliminarily believes it is important that each covered clearing agency place a high priority on the safety and efficiency of its operations and explicitly support the objectives of owners and participants. In addition, supporting the public interest is a broad concept that includes, for example, contributing to the ongoing development of the U.S. financial system, in particular the national clearance and settlement system contemplated by Section 17A of the Exchange Act, and protecting investors and fostering fair and efficient markets. The Commission believes that, by supporting the public interest, market participants can develop common processes that help reduce uncertainty in the market, such as industry standards and market protocols related to clearance and settlement that facilitate a common understanding and interactions among clearing agencies and their members. The Commission preliminarily believes that covered clearing agencies, as SROs, are

appropriately positioned to determine, based on their experience in providing clearance and settlement services and based on information obtained from their members and other stakeholders, as appropriate in the circumstances, what governance arrangements appropriately support the public interest requirements in Section 17A applicable to clearing agencies consistent with the expectations of such stakeholders,¹²⁵ balancing the potentially competing viewpoints of the various stakeholders. The Commission also preliminarily believes that mechanisms through which a covered clearing agency could support the objectives of owners and participants could potentially include representation on the board of directors, user committees, and various public consultation processes.

As with Rule 17Ad-22(d)(8), the Commission preliminarily believes that requiring policies and procedures for clear and transparent governance arrangements support accountability in the decisions, rules, policies, and procedures of the covered clearing agency. Such policies and procedures requirements for governance arrangements provide owners, participants, and, if applicable, general members of the public, with an opportunity to comment on or otherwise provide input to governance arrangements and, in turn, provide a covered clearing agency with the opportunity to balance the potentially competing viewpoints of various stakeholders in its decision making.¹²⁶ Similarly, these policies and procedures requirements for governance arrangements may promote the effectiveness of a covered clearing agency's risk management procedures by fostering a focus on the critical role that risk management plays in promoting prompt and accurate clearance and settlement.¹²⁷

In addition, proposed Rule 17Ad-22(e)(2)(iv) would require that the covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for governance arrangements establishing that the board of directors and senior management have appropriate experience and skills to discharge their

duties and responsibilities.¹²⁸ The Commission preliminarily believes that these aspects of a covered clearing agency's governance framework are particularly important and that establishing requirements in these areas would be appropriate given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets.¹²⁹

The Commission preliminarily believes that directors serving on the board and board committees of a clearing agency play an important role in creating a framework that supports prompt and accurate clearance and settlement because of their role in the decision-making process within a clearing agency. Additionally, the Commission preliminarily believes that a covered clearing agency's senior management has an important role in ensuring, under the board's direction, that the clearing agency's activities are consistent with the objectives, strategy, and risk tolerance of the clearing agency, as determined by the board. Accordingly, the expertise and skills of senior management and directors serving on the board of a covered clearing agency are likely to affect its effective operation. For example, a lack of expertise by board members may deter them from challenging decisions by management and lessen the potential that management would escalate appropriate issues to the board for the board's consideration. Similarly, board members and management should not have conflicts of interests that could undermine the decision-making process within a covered clearing agency or interfere with fair representation and equitable treatment of clearing members or other market participants by a covered clearing agency.

The Commission believes that covered clearing agencies are well positioned to determine which individuals would have the appropriate experience, skills, incentives and integrity to discharge their duties and responsibilities that reflect the particular characteristics of each covered clearing agency. Accordingly, the Commission preliminarily believes that the proposed requirement for policies and procedures would provide the covered clearing agency with a process to evaluate the expertise and skills of board members and senior management, consistent with the particular circumstances of the covered

¹²² See 15 U.S.C. 78q-1(a)(3)(F), (H).

¹²³ See notes 54-56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

¹²⁴ See 15 U.S.C. 78q-1(a)(2)(A).

¹²⁵ See *supra* note 95 (describing requirements for SROs under the Exchange Act and Rule 19b-4).

¹²⁶ See *id.*

¹²⁷ See *supra* note 111 (discussing rules proposed by the Commission to mitigate conflicts of interest at clearing agencies as part of efforts to promote sound risk management and governance arrangements).

¹²⁸ See proposed Rule 17Ad-22(e)(2), *infra* Part 0.

¹²⁹ For a discussion of current practices at registered clearing agencies regarding boards of directors and senior management, and the anticipated impact of the proposed requirements for governance, see Parts 0 and 0, respectively.

clearing agency. Such policies and procedures may include provisions requiring the covered clearing agency to consider, for example, the specific qualifications, experience, competence, character, skills, incentives, integrity or other relevant attributes to support a conclusion that an individual nominee can appropriately serve as a board member or on senior management. Such policies and procedures could also include, among other things, requirements as to industry experience relevant to the services provided by the covered clearing agency, educational background, the absence of a criminal or disciplinary record, or other factors relevant to the qualifications of nominees being considered.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(2). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to provide for governance arrangements that prioritize the safety and efficiency of the covered clearing agency? Why or why not?
- The Commission is not proposing at this time to require a covered clearing agency's policies and procedures provide for governance arrangements that also support the objectives of participants' customers, securities issuers and holders, and other stakeholders. Should the Commission consider such a requirement? Why or why not? Are existing protections under the Exchange Act, such as those in Section 17A(b)(3)(H) (requiring clearing agency rules to provide fair procedures to persons with respect to access to services offered by the clearing agency),¹³⁰ Section 17A(b)(5)(B) (establishing requirements for clearing agencies when determining whether a person may be prohibited or limited with respect to services offered),¹³¹ and Section 19(d)(2) (persons aggrieved by SRO actions may apply to the Commission for review)¹³² already satisfactory or would additional Commission governance requirements also be appropriate? What would be the possible advantages and disadvantages of expanding the scope of proposed Rule 17Ad-22(e)(2)(iii) to require covered clearing agency policies and procedures to consider the interests of persons other than owners and participants?

- Should the Commission require a covered clearing agency's policies and procedures to provide for governance arrangements establishing that the board of directors and senior management have appropriate experience and skills to discharge their duties and responsibilities? Why or why not? Has the Commission provided sufficient guidance on what "experience and skills" would require? Why or why not?

- Are there any other requirements that should be included in the rule to promote clear and transparent governance arrangements?

- The Commission is not proposing at this time to require a covered clearing agency's policies and procedures provide for governance arrangements to ensure that lines of responsibility and accountability at the covered clearing agency are clear and direct. Should the Commission consider such a requirement? Why or why not?

- The Commission is not proposing at this time to require a covered clearing agency's policies and procedures provide for governance arrangements that ensure major decisions of the board of directors are disclosed to the public. Should the Commission consider such a requirement? Why or why not?

- Should there be a phase-in period for covered clearing agencies to comply with proposed Rule 17Ad-22(e)(2), such as until the next annual meeting of shareholders of the covered clearing agency or other time period? Why or why not?

- Are the governance requirements in proposed Rule 17Ad-22(e)(2) necessary to achieve the benefits discussed in Part IV.C.3.a.ii? Why or why not? For example, how and why would particular features of the proposed rules, such as expectations that directors and officers of covered clearing agencies have certain skills and experience, contribute to greater market stability and reduced risk of insufficient internal controls endangering broader financial stability? Are there existing requirements under Section 17A of the Exchange Act, such as the "fair representation" requirement in Section 17A(b)(3)(C), rules and regulations adopted by the Commission and applicable to SROs, or relevant interpretations published by the Commission that already provide a clear and sufficient basis for the Commission to supervise covered clearing agencies in the manner contemplated by proposed Rule 17Ad-22(e)(2) without adopting the proposed rule? What are the possible benefits of adopting the rule as proposed and what possible detriments may arise that the Commission should consider?

- Are there disclosures that a covered clearing agency should be required to make with respect to its governance arrangements? Why or why not? If so, what should be the form and content of those disclosures?

- Should the Commission require that the performance of the board of directors and senior management—individually and as a group—are reviewed on a regular basis? If so, how often should this review be conducted? Should this review be conducted independently?

- Should the board of directors of covered clearing agencies include individuals who are not executives, officers, or employees of the covered clearing agency, or an affiliate of the covered clearing agency? Should the board of directors of covered clearing agencies include an independent audit committee?

- Should the Commission be involved in and/or set requirements and standards with respect to board and management governance at covered clearing agencies? Does the Commission have the requisite statutory authority to adopt the rule proposals and matters addressed in the related questions set forth in this release as to governance arrangements, standards, composition, and qualifications of covered clearing agencies' boards and management? Is the Commission's oversight and establishment of corporate governance measures and standards at clearing agencies a proper and good use of Commission resources? What are the potential costs and benefits of these corporate governance provisions?

3. Proposed Rule 17Ad-22(e)(3): Framework for the Comprehensive Management of Risks

Proposed Rule 17Ad-22(e)(3) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, general business, investment, custody, and other risks that arise in or are borne by the covered clearing agency.¹³³

Existing Rules 17Ad-22(b) and (d) require registered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to meet several requirements that address risk management practices by registered clearing agencies that provide CCP services (Rules 17Ad-22(b)(1) through (4)), certain requirements regarding

¹³⁰ See 15 U.S.C. 78q-1(b)(3)(H).

¹³¹ See 15 U.S.C. 78q-1(b)(5)(B).

¹³² See 15 U.S.C. 78s(d)(2).

¹³³ See proposed Rule 17Ad-22(e)(3), *infra* Part 0.

access to registered clearing agencies that provide CCP services (Rules 17Ad–22(b)(5) through (7)), and certain minimum standards for the operations of registered clearing agencies providing CCP or CSD services.¹³⁴ Consistent with these requirements and the Exchange Act requirements discussed above,¹³⁵ the Commission preliminarily believes that proposed Rule 17Ad–22(e)(3) is appropriate and would require a covered clearing agency's policies and procedures to take a broader, more comprehensive approach to risk management, which the Commission believes is fundamental to a covered clearing agency's functioning given its size, operation, and importance in the U.S. securities markets. While existing rules under the Exchange Act already target certain aspects of risk management, the Commission preliminarily believes that comprehensive risk management policies and procedures established pursuant to proposed Rule 17Ad–22(e)(3) would further support the examination of risks, the assessment of their probability and impact, and the identification of linkages to other entities that in turn pose risks to the covered clearing agency. The Commission also believes that comprehensive risk management policies and procedures would facilitate the development of mechanisms to better prioritize, manage, and monitor risks, and to measure the covered clearing agency's risk tolerance and capacity. In proposing Rule 17Ad–22(e)(3), the Commission is emphasizing a comprehensive approach to risk management that would require risk management policies and procedures be designed holistically, be consistent with each other, and work effectively together in order to mitigate the risk of financial losses to covered clearing agencies' members and participants in the markets they serve.

In addition, policies and procedures for the comprehensive management of risks have the potential to play an important role in making sure that covered clearing agencies better fulfill

the Exchange Act requirements that the rules of a clearing agency be designed to protect investors and the public interest.¹³⁶ Similarly, these requirements may promote the effectiveness of a covered clearing agency's risk management procedures by fostering a focus on the critical role that risk management plays in promoting prompt and accurate clearance and settlement. Accordingly, the Commission preliminarily believes that it is important that covered clearing agencies have policies and procedures that enable them to identify, monitor, and manage the range of risks that arise in or are borne by all aspects of their clearance and settlement activities.

In addition, the Commission is proposing the requirements described below, which do not appear in existing Rules 17Ad–22(b) or (d). The Commission preliminarily believes these requirements would be appropriate for covered clearing agencies given the risks that their size, operation, and importance pose to the U.S. securities markets.

a. Policies and Procedures Requirements, Periodic Review, and Annual Board Approval

Proposed Rule 17Ad–22(e)(3)(i) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for risk management policies, procedures, and systems designed to identify, measure, monitor, and manage the range of risks that arise in or are borne by the covered clearing agency, and subject them to review on a specified periodic basis and approval by the board of directors annually.¹³⁷

The Commission preliminarily believes periodic review of the risk management policies and procedures would allow covered clearing agencies to assess whether the risk management policies and procedures should be updated to account for changing factors in the market and to address and codify in a uniform way the approach to new risks taken since the last periodic review. The Commission preliminarily believes that the board of directors of a covered clearing agency should be required to approve the risk management policies and procedures. The Commission preliminarily believes that, in complying with this requirement, a board of directors may want to subject all material components of the covered clearing agency's risk management policies and procedures to

review pursuant to Rule 17Ad–22(e)(3)(i) due to the critical role that risk management plays in promoting prompt and accurate clearance and settlement.

b. Recovery and Orderly Wind-Down Plans

Proposed Rule 17Ad–22(e)(3)(ii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it establishes plans for the recovery and orderly wind-down of the covered clearing agency necessitated by credit losses, liquidity shortfalls, losses from general business risk, or any other losses.¹³⁸

Securities exchanges, market participants, and investors rely upon the safe, sound, and efficient operations of covered clearing agencies, and accordingly the Commission preliminarily believes that a disorderly wind-down of a covered clearing agency would have systemic consequences.¹³⁹ The Commission preliminarily believes that a recovery plan designed to deal with possible scenarios that may threaten or potentially prevent a covered clearing agency from being able to provide its critical operations and services as a going concern and that assesses a full range of options for recovery could mitigate the impact of a near failure of a covered clearing agency.

Based on its supervisory experience, the Commission recognizes that covered clearing agencies operating in the market today each have relevant standards and practices relating to recovery and orderly wind-down with differing degrees of formality. The Commission therefore preliminarily expects that Rule 17Ad–22(e)(3)(ii) would require covered clearing agencies to review such standards and practices for sufficiency with respect to the safe operation of the covered clearing agency and revise such practices in a manner consistent with the findings of such review consistent with the proposed rule, if adopted, and the requirements of the Exchange Act.

c. Risk Management and Internal Audit

Proposed Rule 17Ad–22(e)(3)(iii) would require a covered clearing agency

¹³⁴ See 17 CFR 240.17Ad–22(b), (d); see also Clearing Agency Standards Release, *supra* note 5, at 66230–43, 66244–58. Specifically, as examples, Rule 17Ad–22(d)(4) requires a registered clearing agency to have policies and procedures reasonably designed to address certain aspects of operational risk, and Rule 17Ad–22(d)(7) requires a registered clearing agency to have policies and procedures reasonably designed to address certain aspects of risks relating to linkages. See 17 CFR 240.17Ad–22(d)(4), (7).

¹³⁵ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

¹³⁶ See 15 U.S.C. 78q–1(a)(2).

¹³⁷ See *id.*

¹³⁸ See proposed Rule 17Ad–22(e)(3), *infra* Part 0.

¹³⁹ See generally Clearing Agency Standards Release, *supra* note 5, at 66283 (noting, in discussing Rule 17Ad–22(d)(11), that having policies and procedures “allow[s] a clearing agency to wind down positions in an orderly way and continue to perform its obligations in the event of a participant default, assuring continued functioning of the securities market in times of stress and reducing systemic risk”).

to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide risk management and internal audit personnel with sufficient authority, resources, independence from management, and access to the board of directors. The Commission preliminarily believes that a covered clearing agency could satisfy the policies and procedures requirement for independence from management by, for example, providing reporting lines for risk management functions that are clear and separate from those for other operations and providing for direct reporting to the board of directors or a relevant committee of the board. In that regard, proposed Rule 17Ad-22(e)(3)(iv) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide risk management and internal audit personnel with oversight by and a direct reporting line to a risk management committee and an audit committee of the board of directors, respectively. Furthermore, proposed Rule 17A-22(e)(3)(v) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for an independent audit committee.

The Commission preliminarily believes that a covered clearing agency should have an effective internal audit function in order to provide, among other things, a rigorous and independent assessment of the effectiveness of the clearing agency's risk management and control processes, and should have an independent audit committee overseeing the internal audit function in order to help promote the integrity and efficiency of the audit process and strengthen internal controls. In order to satisfy the independence requirement for an audit committee under proposed Rule 17Ad-22(e)(2), a covered clearing agency could use such independence criteria as are established by its board of directors. The Commission further preliminarily believes that policies and procedures for risk management are important to the effective operation of a covered clearing agency.

d. Request for Comments

The Commission generally requests comments on all aspects of Proposed Rule 17Ad-22(e)(3). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to maintain a sound risk

management framework for comprehensively managing legal, credit, liquidity, operational, general business, investment, custody, and other risks that arise in or are borne by the covered clearing agency? Why or why not?

- Should the Commission require a covered clearing agency's policies and procedures include plans for the recovery and orderly wind-down of the covered clearing agency necessitated by credit losses, liquidity shortfalls, losses from general business risk, or any other losses? Why or why not?

- How and to whom should the board of directors communicate the results of its review of the risk management framework, if at all?

- Are there any other requirements that should be included in the rule to facilitate policies and procedures that maintain a sound risk management framework, including the proposed requirements for policies and procedures regarding board review and approval of risk management policies and policies and procedures with respect to recovery and orderly wind-down plans? Why or why not? For example, should the Commission require a covered clearing agency's policies and procedures to identify, measure, monitor, and manage the material risks that it poses to other entities, such as other financial market utilities, settlement banks, liquidity providers, or service providers, as a result of interdependencies? Why or why not?

- The Commission is not proposing at this time to require a covered clearing agency's policies and procedures to, in its comprehensive risk management framework, provide for criteria for the independence of audit committee members. Should the Commission consider requirements that specify such criteria? Why or why not? If so, should those criteria be similar to the audit committee independence requirements for listed companies in Rule 10A-3 under the Exchange Act?¹⁴⁰ In order to satisfy the policies and procedures requirement for independence of the audit committee under proposed Rule 17Ad-22(e)(3), should a covered clearing agency be allowed to use such independence criteria as are established by its board of directors?

4. Proposed Rules 17Ad-22(e)(4) Through (7): Financial Risk Management

a. Overview of Financial Risks Faced by Clearing Agencies

Covered clearing agencies face a variety of financial risks from their

participants and service providers, including credit or counterparty default risk, market risk, and liquidity risk. For example, for clearing agencies that provide CSD services, credit risk arises from the potential that a participant will not pay what it owes for securities that it has purchased or will not deliver securities that it has sold. For clearing agencies that clear and settle derivatives contracts, credit risk arises from the potential that a participant will not meet its margin or settlement obligations or pay any other amounts owed to the covered clearing agency.¹⁴¹ Credit risk also arises for clearing agencies of any type from commercial banks or custodians that the covered clearing agency uses to effect money transfers among participants, to hold overnight deposits, or to safeguard cash or other collateral.

Clearing agencies that provide CCP services take offsetting positions as the substituted counterparty to a transaction and, therefore, do not ordinarily face market risk except in the event of a participant default. In such an event, market risk takes two forms. First, the clearing agency may need to liquidate collateral posted by the defaulting participant. The clearing agency is therefore exposed to volatility in the market price of the defaulting participant's non-cash collateral that could result in the clearing agency having insufficient financial resources to cover the losses in the defaulting participant's open positions. Second, a clearing agency providing CCP services is subject to volatility in the market price of the defaulting participant's open positions during the interval between the point at which the clearing agency takes control of those positions and the point at which the clearing agency is able to offset, transfer, or liquidate those positions. A clearing agency faces the risk that its exposure to a participant can change as a result of a change in prices, positions, or both.

A clearing agency must be able to measure the counterparty credit exposures that it is expected to manage effectively. A clearing agency can ascertain its current credit exposure to each participant by marking each participant's outstanding positions to current market prices and (to the extent permitted by a clearing agency's rules

¹⁴¹ In this context, the clearing agency's credit risk is closely related to the participant's market risk. A participant's ability to meet its obligations to the clearing agency may be affected by the participant's exposure to fluctuations in the market value of the participant's open positions. In addition, fluctuations in the market value of the collateral posted by the participant may require the clearing agency to obtain additional margin from the participant.

¹⁴⁰ See 17 CFR 240.10A-3.

and supported by law) netting any gains against any losses.

In addition to credit risk and market risk, clearing agencies also face liquidity or funding risk. Currently, to complete the settlement process, clearing agencies generally rely on incoming payments from participants in net debit positions in order to make payments to participants in net credit positions. If a participant does not have sufficient funds to make an incoming payment immediately when it is due (even though it may be able to pay at some future time), or if a settlement bank is unable to make an incoming payment on behalf of a participant, the clearing agency faces a funding shortfall. A clearing agency typically holds additional financial resources to cover potential funding shortfalls such as margin collateral or lines of credit. However, if collateral cannot be liquidated within a short time, or if lines of credit are unavailable, liquidity risk would be exacerbated.

b. Current Financial Risk Management Requirements for CCPs

Rules 17Ad-22(b)(1) through (4) concern risk management requirements for clearing agencies that perform CCP services (hereinafter “CCPs” in this part). Rule 17Ad-22(b)(1) requires that CCPs establish, implement, maintain and enforce written policies and procedures reasonably designed to measure their credit exposures at least once per day.¹⁴² Rule 17Ad-22(b)(2) requires that CCPs establish, implement, maintain and enforce written policies and procedures reasonably designed to use margin requirements to limit their exposures to participants.¹⁴³ This margin can also be used to reduce a CCP’s losses in the event of a participant default. Rule 17Ad-22(b)(3) requires that CCPs establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to withstand, at a minimum, a default by the participant family to which a CCP has the largest exposure in extreme but plausible market conditions, except that CCPs clearing security-based swap transactions must maintain additional financial resources sufficient to withstand the simultaneous default by the two participant families to which a CCP has the largest exposures.¹⁴⁴ Finally, Rule 17Ad-22(b)(4) requires that CCPs establish, implement, maintain and enforce written policies and procedures reasonably designed to

provide for an annual model validation that consists of evaluating the performance of a clearing agency’s margin models and the related parameters and assumptions associated with such models and that is performed by a qualified person who is free from influence from the persons responsible for development or operation of the models being validated.¹⁴⁵

c. Proposed Rule 17Ad-22(e)(4): Credit Risk

Proposed Rule 17Ad-22(e)(4) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to participants and those exposures arising from its payment, clearing, and settlement processes.¹⁴⁶ The Commission preliminarily believes the proposed rule is consistent with the requirements of the Exchange Act discussed above.¹⁴⁷

Proposed Rule 17Ad-22(e)(4)(i) would require a covered clearing to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. The Commission’s intention in proposing the term “high degree of confidence” is to refer to the statistical meaning of this term.¹⁴⁸ The proposed rule would require a covered clearing agency to use statistical methods to develop models in order to estimate the financial resources required under proposed Rule 17Ad-22(e)(4)(ii) and (iii),¹⁴⁹ and to comply with the requirements of proposed Rules 17Ad-22(e)(4)(ii) and (iii), while recognizing that such an approach is necessarily imprecise to at least some degree.

Proposed Rule 17Ad-22(e)(4)(ii) would require a covered clearing agency that provides CCP services, and that is “systemically important in multiple jurisdictions” or “a clearing agency involved in activities with a more complex risk profile,” to establish, implement, maintain and enforce

written policies and procedures reasonably designed to maintain additional financial resources, to the extent not already maintained pursuant to proposed Rule 17Ad-22(e)(4)(i), at a minimum level necessary to enable it to cover a wide range of foreseeable stress scenarios, including but not limited to the default of the two participant families that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions (hereinafter the “cover two” requirement).

Proposed Rule 17Ad-22(e)(4)(iii) would require a covered clearing agency that is not subject to proposed Rule 17Ad-22(e)(4)(ii) to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain additional financial resources, to the extent not already maintained pursuant to proposed Rule 17Ad-22(e)(4)(i), at the minimum to enable it to cover a wide range of foreseeable stress scenarios, including the default of the participant family that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions (hereinafter the “cover one” requirement).¹⁵⁰ The Commission notes that the requirement in proposed Rules 17Ad-22(e)(4)(ii) and (iii) to examine exposure under foreseeable stress scenarios including extreme but plausible market conditions means the covered clearing agency may need to use models to determine how its estimated exposure under such conditions differs from its actual exposure to positions of such participants, which it would be required to measure under proposed Rule 17Ad-22(e)(4)(i).

Also, as previously discussed, the Commission is proposing Rule 17Ad-22(a)(4) to define “clearing agency involved in activities with a more complex risk profile.”¹⁵¹ The Commission is also proposing Rule 17Ad-22(a)(19) to define “systemically important in multiple jurisdictions” to

¹⁴⁵ See 17 CFR 240.17Ad-22(b)(4).

¹⁴⁶ See proposed Rules 17Ad-22(e)(4), *infra* Part 0.

¹⁴⁷ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

¹⁴⁸ See, e.g., Arthur S. Goldberger, *A Course in Econometrics* 122–23 (Harvard Univ. Press, 2003) (defining confidence intervals for parameter estimates).

¹⁴⁹ See *supra* Part 0 (noting that a clearing agency must be able to measure the counterparty credit exposures in order to manage risk effectively).

¹⁵⁰ The Commission notes that, with the exception of security-based swap clearing agencies, all registered clearing agencies providing CCP services are all currently required to meet a “cover one” standard under Rule 17Ad-22(b)(3), and therefore the Commission anticipates that covered clearing agencies may need to make only limited changes to policies and procedures to satisfy the proposed requirement, if adopted. See *infra* Parts 0 and 0 (discussing current practices at registered clearing agencies relating to credit risk and the anticipated economic effect of the proposed requirement, respectively).

¹⁵¹ See *supra* Part 0 (discussing the scope of proposed Rule 17Ad-22(e)); *supra* notes 79–80 and accompanying text.

¹⁴² See 17 CFR 240.17Ad-22(b)(1).

¹⁴³ See 17 CFR 240.17Ad-22(b)(2).

¹⁴⁴ See 17 CFR 240.17Ad-22(b)(3).

mean a covered clearing agency that has been determined by the Commission to be systemically important in more than one jurisdiction pursuant to Rule 17Ab2–2.¹⁵²

Like the “cover two” requirement in Rule 17Ad–22(b)(3), which applies to registered clearing agencies that provide CCP services for security-based swaps,¹⁵³ proposed Rule 17Ad–22(e)(4)(ii) would impose a “cover two” requirement to address credit risk of certain covered clearing agencies: Those systemically important in multiple jurisdictions and those involved in activities with a more complex risk profile. The Commission notes that the set of complex risk profile clearing agencies subject to this requirement would include, as of the date of this proposal, only registered clearing agencies that provide CCP services for security-based swaps, which are already subject to the “cover two” requirement in Rule 17Ad–22(b)(3). In addition, the Commission notes that no covered clearing agency would be systemically important in multiple jurisdictions unless and until the Commission made such a determination pursuant to proposed Rule 17Ab2–2.¹⁵⁴ For any covered clearing agency not currently subject to a “cover two” requirement that could be determined by the Commission in the future to be either systemically important in multiple jurisdictions or involved in activities with a more complex risk profile, the Commission believes that requiring such entities to improve their resilience to offset increased risk and to prepare for extreme but plausible market conditions is appropriate because it could decrease the likelihood that systemic events in other jurisdictions or extreme volatility in more complex financial instruments would result in interruptions to the provision of clearance and settlement services in the U.S. securities markets.

In addition, the Commission is proposing the requirements described below. In discussing these requirements, the below sections describe how they differ from existing requirements in Rules 17Ad–22(b)(1) through (4) applicable to security-based swap

clearing agencies, previously discussed above.¹⁵⁵

i. Prefunded Financial Resources

Proposed Rule 17Ad–22(e)(4)(iv) would require a covered clearing agency providing CCP services that is either systemically important in multiple jurisdictions or a complex risk profile clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to include prefunded financial resources, excluding assessments for additional guaranty fund contributions or other resources that are not prefunded, when calculating the financial resources available to meet the standards under proposed Rules 17Ad–22(e)(4)(i) through (iii), as applicable.¹⁵⁶ The Commission preliminarily believes that prefunding default obligations is appropriate because of the importance of the ability of a covered clearing agency to meet its default resource obligations to the clearance and settlement system, given the risks that its size, operation, and importance pose to the U.S. securities markets.¹⁵⁷ Immediately available financial resources are necessary to ensure that a covered clearing agency can meet its financial obligations on an ongoing basis. Without prefunded financial resources, a covered clearing agency may be unable to meet its financial obligations in stressed market conditions, when clearing members may be unwilling or unable to contribute to the clearing agency’s guaranty fund in the event of a member default.

The Commission notes that while the ability to assess participants for contributions under applicable covered clearing agency governing documents, rules, or agreements could not be included in this calculation, previously paid-in participant contributions into a covered clearing agency default fund could be counted to the extent the clearing agency’s rules, policies, or procedures permit such resources to be used in a manner equivalent to other financial resources in the default fund. Other sources of prefunded resources, such as margin previously posted to the clearing agency by participants, could

also be treated in this manner. In addition, while the ability to draw down under a revolving loan facility could not be counted towards prefunded resources because funds from such loan facility would not be in the covered clearing agency’s immediate possession, the covered clearing agency could count borrowed funds already drawn down, such as under a term loan or other credit facility.

Existing requirements under Rule 17Ad–22 do not include requirements for prefunded financial resources at registered clearing agencies. The proposed requirement reflects the Commission’s recognition of the importance of a covered clearing agency meeting its default resource obligations, given the risks that its size, operation, and importance pose to the U.S. securities markets.

ii. Combined or Separately Maintained Clearing or Guaranty Funds

Proposed Rule 17Ad–22(e)(4)(v) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain the financial resources required under proposed Rules 17Ad–22(e)(4)(i) through (iii) in combined or separately maintained clearing or guaranty funds.¹⁵⁸ The proposed rule makes clear that a covered clearing agency may choose to maintain a separate default fund for purposes of complying with proposed Rules 17Ad–22(e)(4)(i) through (iii).

This requirement would be similar to the requirement in Rule 17Ad–22(b)(3) requiring a security-based swap clearing agency to have policies and procedures reasonably designed to maintain financial resources generally or in separately maintained funds.¹⁵⁹ The Commission believes that this approach facilitates the operations of clearing agencies. For example, clearing agencies may maintain separate default funds for each product or asset type cleared, in order to more appropriately tailor risk management requirements or contain losses from a default to that fund.

iii. Testing the Sufficiency of Financial Resources

Proposed Rule 17Ad–22(e)(4)(vi) would require a covered clearing agency

¹⁵² See proposed Rule 17Ad–22(a)(19), *infra* Part 0; see also *infra* Parts 0 and 0 (discussing the determinations process under proposed Rule 17Ab2–2 and providing proposed rule text).

¹⁵³ See 17 CFR 240.17Ad–22(b)(3); see also *infra* Part 0 (discussing the scope of proposed Rule 17Ad–22(e)); Clearing Agency Standards Release, *supra* note 5, at 66233–36 (discussing proposed Rule 17Ad–22(b)(3)).

¹⁵⁴ See *infra* Parts 0 and 0 (discussing the determinations process under proposed Rule 17Ab2–2 and providing proposed rule text).

¹⁵⁵ See *supra* Part 0.

¹⁵⁶ See proposed Rule 17Ad–22(e)(4)(iv), *infra* Part 0.

¹⁵⁷ See generally 12 U.S.C. 5461 (Congress finding, among other things, that enhancements to the regulation and supervision of systemically important FMs and the conduct of systemically important PCS activities by financial institutions are necessary, under Title VIII, to provide consistency, to promote robust risk management and safety and soundness, to reduce systemic risks, and to support the stability of the broader financial system).

¹⁵⁸ See proposed Rule 17Ad–22(e)(4)(v), *infra* Part 0.

¹⁵⁹ Rule 17Ad–22(b)(3) currently also permits a security-based swap clearing agency to have policies and procedures reasonably designed to maintain financial resources generally or in separately maintained funds. See 17 CFR 240.17Ad–22(b)(3); see also Clearing Agency Standards Release, *supra* note 5, at 66233–236.

to establish, implement, maintain and enforce written policies and procedures reasonably designed to test the sufficiency of its total financial resources available to meet the minimum financial resource requirements under proposed Rules 17Ad–22(e)(4)(i) through (iii), as applicable, by conducting a stress test of its total financial resources at least once each day using standard predetermined parameters and assumptions.¹⁶⁰ Registered clearing agencies are not subject to requirements for testing the sufficiency of their financial resources under existing Rule 17Ad–22.

The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to conduct a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions, and consider modifications to ensure they are appropriate for determining the covered clearing agency's required level of default protection in light of current market conditions. When the products cleared or markets served by a covered clearing agency display high volatility, become less liquid, or when the size or concentration of positions held by the entity's participants increases significantly, the proposed rule would specifically require a covered clearing agency to have policies and procedures for conducting comprehensive analyses of stress testing scenarios, models, and underlying parameters and assumptions more frequently than monthly. The Commission preliminarily believes that what constitutes "high volatility" and "low liquidity" would vary across asset classes that a covered clearing agency might clear. Accordingly, the Commission preliminarily believes that a clearing agency would need flexibility to address changing circumstances and is therefore not proposing to prescribe triggers for any particular circumstance.

The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for the reporting of the results of this analysis to the appropriate decision makers at the covered clearing agency, including its risk management committee or board of directors, and to require the use of the results to evaluate the adequacy of and to adjust its margin methodology, model parameters, and any other relevant

aspects of its credit risk management policies and procedures, in supporting compliance with the minimum financial resources requirements discussed above.

The Commission is also proposing to add Rule 17Ad–22(a)(18) to define "stress testing" to mean the estimation of credit and liquidity exposures that would result from the realization of extreme but plausible price changes or changes in other valuation inputs and assumptions.¹⁶¹ The Commission preliminarily believes that stress testing is an important component of the proposed rules because stress testing may enable a covered clearing agency to be prepared for an extreme event that may not be anticipated or expected based solely on current market conditions or from a sample of historical data.

The Commission preliminarily believes that the requirements in proposed Rule 17Ad–22(e)(4)(vi) are appropriate for testing the sufficiency of the financial resources of covered clearing agencies because, in certain market conditions, such as periods of high volatility or diminished liquidity, existing stress scenarios, models, or underlying parameters may no longer be valid or appropriate. Based on its supervisory experience, the Commission believes that certain, but not all, covered clearing agencies adjusted their stress testing scenarios following the 2008 financial crisis to incorporate larger debt, equity, and credit market shocks similar to those experienced during the crisis. Accordingly, the Commission preliminarily believes that specific policies and procedures contemplating actions to be taken by all covered clearing agencies in such circumstances are necessary to ensure the safe functioning of the covered clearing agencies as required by the Exchange Act,¹⁶² and that requiring periodic feedback and analysis on the strength of credit risk management policies and procedures would improve the reliability of those policies and procedures. The Commission also preliminarily believes that the rule would provide a covered clearing agency with the flexibility to use stress scenarios that are appropriately tailored to current market conditions and that can be revised over time as markets change and believes that such flexibility is appropriate to achieve the objectives of the Exchange Act.

iv. Annual Conforming Model Validation

Proposed Rule 17Ad–22(e)(4)(vii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require a conforming model validation for its credit risk models to be performed not less than annually or more frequently as may be contemplated by the covered clearing agency's risk management policies and procedures.¹⁶³ The Commission preliminarily believes that an annual cycle is appropriate for the reasons described in Part II.A.3. The Commission notes that other important reviews such as auditing of the financial statements of registered clearing agencies and their disclosure are required to occur on an annual basis as well.¹⁶⁴

The Commission is proposing to add Rule 17Ad–22(a)(5) to define "conforming model validation" to mean an evaluation of the performance of each material risk management model used by a covered clearing agency, along with the related parameters and assumptions associated with such models.¹⁶⁵ Such model validation would apply to models that would include initial margin models, liquidity risk models, and models used to generate clearing or guaranty fund requirements. A conforming model validation would also require that the model validation be performed by a qualified person who is free from influence from the persons responsible for the development or operation of the models or policies being validated so that credit risk models can be candidly assessed.¹⁶⁶ Generally, the Commission considers that a person is free from influence when that person does not perform functions associated with the clearing agency's models (except as part of the annual model validation) and does not report to a person who performs these functions. The Commission generally would not expect that it would be necessary for policies and procedures adopted pursuant to this proposed requirement to require the clearing agency to separate organizationally model review from model development or to maintain two separate quantitative teams.

The proposed rule differs from the existing requirement for security-based swap clearing agencies in Rule 17Ad–

¹⁶¹ See proposed Rule 17Ad–22(a)(18), *infra* Part 0.

¹⁶² See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

¹⁶³ See proposed Rule 17Ad–22(e)(4)(vii), *infra* Part 0.

¹⁶⁴ See 17 CFR 240.17Ad–22(c)(2).

¹⁶⁵ See proposed Rule 17Ad–22(a)(5), *infra* Part 0.

¹⁶⁶ See Clearing Agency Standards Release, *supra* note 5, at 66238.

¹⁶⁰ See proposed Rule 17Ad–22(e)(4)(vi), *infra* Part 0.

22(b)(4) by defining in explicit terms the requirements for a conforming model validation and by requiring it for credit risk models.¹⁶⁷ The proposed rule would also apply to any covered clearing agency, and not only security-based swap clearing agencies. The Commission preliminarily believes, because credit risk models play an important role in limiting systemic risk, that it is important to create a consistent, clear, and uniformly applied minimum standard for model validation across all covered clearing agencies.¹⁶⁸ The Commission also preliminarily believes that annual conforming model validation would provide unbiased feedback on the performance of such models and policies, and therefore could improve their reliability.

d. Proposed Rule 17Ad–22(e)(5): Collateral

Proposed Rule 17Ad–22(e)(5) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to limit the assets it accepts as collateral to those with low credit, liquidity, and market risks, and also require policies that set and enforce appropriately conservative haircuts and concentration limits if the covered clearing agency requires collateral to manage its own or its participants' credit exposures.¹⁶⁹ The proposed rule includes requirements similar to those applicable to registered clearing agencies under Rule 17Ad–22(d)(3) but would, in addition, require a covered clearing agency's policies and procedures to set and enforce appropriately conservative haircuts and concentration limits if the covered clearing agency requires collateral to manage its own or its participants' credit exposures.¹⁷⁰

¹⁶⁷ Rule 17Ad–22(b)(4) requires a security-based swap clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for an annual model validation consisting of evaluating the performance of the clearing agency's margin models and the related parameters and assumptions associated with such models by a qualified person who is free from influence from the persons responsible for the development or operation of the models being validated. See 17 CFR 240.17Ad–22(b)(4); see also Clearing Agency Standards Release, *supra* note 5, at 66236–238.

In contrast to proposed Rules 17Ad–22(a)(5) and (e)(4)(vii), Rule 17Ad–22(b)(4) requires only a model validation for margin models and does not specify the general elements of a model validation.

¹⁶⁸ See generally Clearing Agency Standards Release, *supra* note 5, at 66238.

¹⁶⁹ See proposed Rule 17Ad–22(e)(5), *infra* Part 0.

¹⁷⁰ Registered clearing agencies are currently subject to requirements under Rule 17Ad–22(d)(3), which requires registered clearing agencies to hold assets in a manner that minimizes risk of loss or risk of delay in access to them and invest assets in

The Commission is proposing Rule 17Ad–22(e)(5) to require policies and procedures with respect to specific practices to be followed by a covered clearing agency when managing collateral to ensure the safeguarding of funds, consistent with the requirements under the Exchange Act discussed above.¹⁷¹ In doing so, proposed Rule 17Ad–22(e)(5) would promote confidence that covered clearing agencies are able to meet their settlement obligations by reducing the likelihood that assets securing participant obligations to the covered clearing agency would be unavailable or insufficient when the covered clearing agency needs to draw on them. Specifically, such requirements recognize the role played by system-wide asset price deterioration in generating systemic risk and the vulnerability a covered clearing agency could face if posted collateral were concentrated in assets that subsequently experience such deterioration in price.¹⁷² The Commission preliminarily believes the proposed rule is appropriate given the risks that its size, operation, and importance pose to the U.S. securities markets, thereby promoting stability in the national system for clearance and settlement by increasing the likelihood collateral holdings will function as designed when faced with stressed market conditions.

In addition, the Commission is proposing that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to include a not-less-than-annual review of the sufficiency of a covered clearing agency's collateral haircuts and concentration limits.¹⁷³ Rule 17Ad–22(d) does not impose a similar requirement on registered clearing agencies. The Commission preliminarily believes that the proposed approach is

instruments with minimal credit, market, and liquidity risk. See 17 CFR 240.17Ad–22(d)(3); see also Clearing Agency Standards Release, *supra* note 5, at 66247–48; *infra* Part 0 (discussing proposed Rule 17Ad–22(e)(16)).

Similarly, the Commission preliminarily believes that appropriately conservative haircuts and concentration limits would require a covered clearing agency to value assets in a manner that minimizes risk of loss or risk of delay in access to them.

¹⁷¹ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

¹⁷² See, e.g., Mark Roe, Clearinghouse Overconfidence (Aug. 11, 2013), available at <http://ssrn.com/abstract=2224305> (discussing the risks posed to clearing agencies by asset price deterioration).

¹⁷³ See proposed Rule 17Ad–22(e)(5), *infra* Part 0.

appropriate because of the importance of collateral haircuts and concentration limits to a covered clearing agency's risk management policies and procedures. Because of the role collateral plays in a default, a covered clearing agency needs assurance of its value in the event of liquidation, as well as the capacity to draw upon that collateral promptly. The Commission preliminarily believes, given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, that it is important to require policies and procedures for a not-less-than-annual review of the sufficiency of its collateral haircuts and concentration limits.¹⁷⁴

e. Proposed Rule 17Ad–22(e)(6): Margin

Generally, proposed Rule 17Ad–22(e)(6) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that is monitored by management on an ongoing basis and regularly reviewed, tested, and verified.¹⁷⁵

Rule 17Ad–22(b)(2) currently requires registered clearing agencies that provide CCP services to use risk-based models and parameters to set margin requirements, and to review such margin requirements and the risk-based models and parameters at least monthly,¹⁷⁶ and the proposed rule would impose substantially the same requirements.¹⁷⁷ Rule 17Ad–22(b)(4) also currently requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for an annual model validation consisting of evaluating the performance of the clearing agency's margin models and the related parameters and assumptions associated with such models by a qualified person who is free from influence from the persons responsible for the development or operation of the models being validated.

The Commission notes that proposed Rule 17Ad–22(e)(6) is different from these existing requirements under Rule

¹⁷⁴ See *supra* Part 0 (discussing the Commission's rationale for imposing varying frequencies of review under certain policies and procedures requirements of the proposed rules).

¹⁷⁵ See proposed Rule 17Ad–22(e)(6), *infra* Part 0.

¹⁷⁶ See 17 CFR 240.17Ad–22(b)(2).

¹⁷⁷ Similar to Rule 17Ad–22(b)(2), proposed Rule 17Ad–22(e)(6)(vi) would require a covered clearing agency to conduct on at least a monthly basis a conforming sensitivity analysis of its margin resources and its parameters and assumptions for backtesting. See *infra* Parts 0 and 0.

17Ad–22, as discussed below. The proposed requirements reflect more specific recognition by the Commission of the importance margin plays in risk management by covered clearing agencies. The Commission preliminarily believes that these requirements for a covered clearing agency to periodically verify and modify margin requirements in light of changing market conditions would be appropriate to mitigate the risks posed by a covered clearing agency to financial markets in periods of financial stress considering the risks that its size, operation, and importance pose to the U.S. securities markets.

i. Active Management of Model Risk

Proposed Rule 17Ad–22(e)(6)(i) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to result in a margin system that at a minimum considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market.¹⁷⁸ The complexity and product risk characteristics of the cleared product and underlying instrument can influence the margin requirements necessary to manage the credit exposures posed by a covered clearing agency's participants. Additionally, the volume of trading may also influence the margin requirements necessary to manage the credit exposures proposed by a covered clearing agency's participants. The Commission preliminarily believes that expressly requiring policies and procedures regarding the active management of a covered clearing agency's margin system to account for those factors and differences would help ensure the effectiveness of a covered clearing agency's risk management practices.

ii. Collection of Margin

Proposed Rule 17Ad–22(e)(6)(ii) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that the margin system would mark participant positions to market and collect margin, including variation margin or equivalent charges if relevant, at least daily, and include the authority and operational capacity to make intraday margin calls in defined circumstances.¹⁷⁹ The

Commission preliminarily believes that marking each participant's outstanding positions to current market prices is an important feature of an effective margin system because adverse price movements can rapidly increase a covered clearing agency's exposures to its participants. Rule 17Ad–22(b)(2) requires registered clearing agencies that provide CCP services to calculate margin requirements daily. The Commission preliminarily believes that requiring a covered clearing agency to have the authority and operational capacity to make intraday margin calls in defined circumstances will benefit covered clearing agencies by covering settlement risk created by intraday price movements. By being more specific with respect to its expectations for collecting sufficient margin and having other liquid resources at its disposal, the Commission expects that a covered clearing agency will be better able to organize its practices accordingly, to limit its exposures to potential losses from defaults by clearing members in normal market conditions considering the risks that its size, operation, and importance pose to the U.S. securities markets.¹⁸⁰

iii. Ninety-Nine Percent Confidence Level

Proposed Rule 17Ad–22(e)(6)(iii) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to calculate margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default.¹⁸¹ The Commission is proposing to add Rule 17Ad–22(a)(14) to define “potential future exposure” to mean the maximum exposure estimated to occur at a future point in time with an established single-tailed confidence level of at least 99% with respect to the estimated distribution of future exposure.¹⁸² The Commission preliminarily believes that a 99% confidence level is an appropriately conservative setting that is also consistent with the international standard for bank capital requirements, which requires banks to measure market risks at a 99% confidence interval when

determining regulatory capital requirements.¹⁸³

The Commission preliminarily believes that, rather than establish specific criteria in advance, it is more appropriate to address liquidation periods separately with respect to each covered clearing agency through the Commission's supervisory process under Sections 17A and 19 of the Exchange Act,¹⁸⁴ so that the length of the liquidation period can be appropriately tailored to the characteristics of the products cleared by the covered clearing agency as financial markets evolve.

iv. Price Data Source

Proposed Rule 17Ad–22(e)(6)(iv) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that it uses reliable sources of timely price data and procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable.¹⁸⁵ The Commission preliminarily believes that a covered clearing agency should use reliable sources of timely price data because its margin system needs such data to operate with a high degree of accuracy and reliability, given the risks that the covered clearing agency's size, operation, and importance pose to the U.S. securities markets.¹⁸⁶ Based on its supervisory experience, the Commission preliminarily believes that reliable data sources may include the following features, among other things: (i) Provision of data by the data source that is accurate, complete, and timely; (ii) capability of the data source to provide broad data sets to the covered clearing agency; and (iii) limited need for manual intervention by the clearing agency. In some situations, price data may not be available or reliable, such as in instances where third party data

¹⁸³ See Clearing Agency Standards Release, *supra* note 5, at 66226 (describing the history of usage for a 99% confidence interval). A 99% confidence level would represent one day of actual trading losses that exceeded the results predicted by the model (as revealed by backtesting) for every 100 days that trading occurred. See *id.* Requiring a covered clearing agency to have policies and procedures with a higher or lower confidence level than that currently used by its clearing members could potentially create incentives or disincentives for clearing members to clear based on the statistical confidence level alone.

¹⁸⁴ See *supra* Part 0 (discussing the regulatory framework under Section 17A of the Exchange Act); *supra* note 96 (describing the requirements in Section 19(b) of the Exchange Act).

¹⁸⁵ See proposed Rule 17Ad–22(e)(6)(iv), *infra* Part 0.

¹⁸⁶ Cf. PFMI Report, *supra* note 1, at 51 (discussing Principle 6, margin).

¹⁷⁸ See proposed Rule 17Ad–22(e)(6)(i), *infra* Part 0.

¹⁷⁹ See proposed Rule 17Ad–22(e)(6)(ii), *infra* Part 0.

¹⁸⁰ See Clearing Agency Standards Release, *supra* note 5, at 66231.

¹⁸¹ See proposed Rule 17Ad–22(e)(6)(iii), *infra* Part 0.

¹⁸² See proposed Rule 17Ad–22(a)(14), *infra* Part 0.

providers experience lapses in service or where limited liquidity otherwise makes price discovery difficult. Establishing appropriate procedures and sound valuation models is a useful step a covered clearing agency can take to help protect itself in such situations. The Commission preliminarily believes, in selecting price data sources, a covered clearing agency should consider the likelihood of the data being provided under a variety of market conditions and not select price data sources based on their cost alone.

v. Method for Measuring Credit Exposure

Proposed Rule 17Ad-22(e)(6)(v) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure the use of an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products. Measuring such portfolio effects means a covered clearing agency may take into account certain netting procedures or offsets through which credit exposure may be reduced in measuring credit exposure, including the use of portfolio margining procedures across products where applicable.¹⁸⁷ The Commission preliminarily believes that this proposed requirement that covered clearing agencies contemplate both product level and portfolio level effects when considering and measuring their credit exposure is appropriate, given that the method for measuring credit exposure will determine the accuracy of a covered clearing agency's measurements in practice.

vi. Backtesting and Sensitivity Analysis

Under proposed Rule 17Ad-22(e)(6)(vi), in addition to the requirement discussed above in relation to monitoring by management on an ongoing basis, a covered clearing agency that provides CCP services would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to regularly review, test, and verify its risk-based margin system by conducting backtests at least once each day and conducting a conforming sensitivity analysis of its margin resources and its parameters and assumptions for backtesting at least monthly, and consider modifications to ensure the backtesting practices are appropriate for determining the adequacy of its margin

resources.¹⁸⁸ The Commission preliminarily believes that, since margin positions must be calculated at least daily, policies and procedures should also provide for daily backtesting. The Commission preliminarily believes that requiring, on at least a monthly basis, a conforming sensitivity analysis of margin resources and parameters and assumptions for backtesting would appropriately balance cost concerns with the interest of assuring that risk margin methodologies continue to reflect current conditions. The Commission notes that, based on its supervisory experience, risk management committees of the board and similar management committees of registered clearing agencies commonly meet on a monthly basis, and therefore the proposed requirement of a monthly sensitivity analysis would be consistent with such meeting frequency.

Backtesting is a technique used to compare the potential losses forecasted by a model with the actual losses that participants incurred, and is intended to reveal the accuracy of models. Misspecified or miscalibrated models may lead to errors in decision making. The Commission is proposing to require policies and procedures that provide for backtesting the margin models used by covered clearing agencies to help uncover and address possible errors in model design, misapplication of models, or errors in the inputs to, and assumptions underlying, margin models. The Commission is also proposing to add Rule 17Ad-22(a)(1) to define "backtesting" to mean an ex-post comparison of actual outcomes with expected outcomes derived from the use of margin models.¹⁸⁹ Additionally, the Commission is proposing to add Rule 17Ad-22(a)(17) to define "sensitivity analysis" to mean an analysis that involves analyzing the sensitivity of a model to its assumptions, parameters, and inputs.¹⁹⁰ The Commission preliminarily understands that these terms and definitions are commonly accepted among, and employed by, market participants.¹⁹¹

The Commission is also proposing to add Rule 17Ad-22(a)(6) to define "conforming sensitivity analysis" to mean a sensitivity analysis that

considers the impact on the model of both moderate and extreme changes in a wide range of inputs, parameters, and assumptions, including correlations of price movements or returns if relevant, which reflect a variety of historical and hypothetical market conditions and actual and hypothetical portfolios of proprietary positions and, where applicable, customer positions. The Commission notes that "sensitivity analysis" is a commonly understood term among industry participants,¹⁹² and the Commission intends for the proposed definition to ensure that the specified minimum requirements are met in performing sensitivity analyses. Under the proposed definition, a conforming sensitivity analysis, when performed by or on behalf of a covered clearing agency involved in activities with a more complex risk profile, would consider the most volatile relevant periods, where practical, that have been experienced by the markets served by the clearing agency. Under the proposed definition, a conforming sensitivity analysis would also test the sensitivity of the model to stressed market conditions, including the market conditions that may ensue after the default of a member and other extreme but plausible conditions as defined in a covered clearing agency's risk policies.¹⁹³

Under proposed Rule 17Ad-22(e)(6)(vi), the policies and procedures for model review, testing, and verification requirements would include policies and procedures for conducting a conforming sensitivity analysis more frequently than monthly when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by participants increases or decreases significantly.¹⁹⁴ The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to report the results of such conforming sensitivity analysis to appropriate decision makers at the covered clearing agency, including its risk management committee or board of directors, and use these results to evaluate the adequacy of and adjust its margin methodology, model parameters, and any other relevant aspects of its credit risk management policies and procedures. The Commission preliminarily believes that the requirement to report to

¹⁸⁸ See proposed Rule 17Ad-22(e)(6)(vi), *infra* Part 0.

¹⁸⁹ See proposed Rule 17Ad-22(a)(1), *infra* Part 0.

¹⁹⁰ See proposed Rule 17Ad-22(a)(17), *infra* Part 0.

¹⁹¹ See, e.g., Alexander J. McNeil, Rüdiger Frey & Paul Embrechts, *Quantitative Risk Management: Concepts, Techniques, and Tools*, at 35 (Princeton Univ. Press, 2005) (defining "factor-sensitivity measures" as a change in portfolio value given a predetermined change in one of the underlying risk factors).

¹⁹² See *id.*

¹⁹³ See proposed Rule 17Ad-22(a)(6), *infra* Part 0.

¹⁹⁴ See proposed Rule 17Ad-22(e)(6)(vi), *infra* Part 0.

¹⁸⁷ See proposed Rule 17Ad-22(e)(6)(v), *infra* Part 0.

appropriate decision makers at the covered clearing agency, including its risk management committee or board of directors, is important to ensure that such risk management requirements and compliance therewith are addressed at the most senior levels of the governance framework of the covered clearing agency, commensurate with the importance of said requirements.

By proposing the requirement for conducting a conforming sensitivity analysis, the Commission expects that feedback generated by these analyses would improve the performance of risk-based margin systems used by covered clearing agencies and therefore better ensure the safe functioning of covered clearing agencies. Additionally, the Commission preliminarily believes that conforming sensitivity analysis may help a covered clearing agency discover and address shortcomings in its margin models that would not otherwise be revealed through backtesting and is accordingly appropriate given the risks that its size, operation, and importance pose to the U.S. securities markets.¹⁹⁵

vii. Annual Conforming Model Validation

Rule 17Ad-22(b)(4) currently requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for an annual model validation consisting of evaluating the performance of the clearing agency's margin models and the related parameters and assumptions associated with such models by a qualified person who is free from influence from the persons responsible for the development or operation of the models being validated. Under proposed Rule 17Ad-22(e)(6)(vii), a covered clearing agency that provides CCP services would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to require not less than annually a conforming model validation of the covered clearing agency's margin system and related models.¹⁹⁶ As previously discussed, the model validation would be required to include initial margin models, liquidity risk models, and models used to generate clearing or guaranty fund requirements. Also, for a model validation to be considered a

conforming model validation under the proposed rule, it would have to be performed by a qualified person who is free from influence from the persons responsible for the development or operation of the models or policies being validated.¹⁹⁷

The Commission preliminarily believes the proposed approach of requiring policies and procedures that subject a covered clearing agency's models to review by such parties would be relevant to ensuring the safe operation of covered clearing agencies and will help to ensure that covered clearing agencies have the opportunity to benefit from the views of a qualified person free from influence and incorporate alternative risk management methodologies into their models as appropriate. The Commission preliminarily believes this is important for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets.

f. Proposed Rule 17Ad-22(e)(7): Liquidity Risk

Proposed Rule 17Ad-22(e)(7) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively measure, monitor, and manage the liquidity risk that arises in or is borne by it, by meeting, at a minimum, the ten requirements specified below.¹⁹⁸

Liquidity risk describes the risk that an entity will be unable to meet financial obligations on time due to an inability to deliver funds or securities in the form required though it may possess sufficient financial resources in other forms. Although Rule 17Ad-22(d)(11) currently requires, among other things, that a registered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to take timely action to contain liquidity pressures and to continue to meet obligations in the event of a participant default, the Commission does not currently have requirements for policies and procedures of registered clearing agencies regarding the management of liquidity risk with the level of specificity proposed in Rule 17Ad-22(e)(7). Given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, the proposed requirements

would require a covered clearing agency to maintain sufficient liquidity resources to ensure they are prepared to meet their payment obligations in order to facilitate the prompt and accurate clearance and settlement of securities transactions.

i. Sufficient Liquid Resources

Proposed Rule 17Ad-22(e)(7)(i) would require that a covered clearing agency's policies and procedures be reasonably designed to ensure that it maintains sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that includes the default of the participant family that would generate the largest aggregate payment obligation for it in extreme but plausible market conditions. As noted above, maintaining sufficient liquidity resources helps ensure that a covered clearing agency is prepared to meet its payment obligations in order to facilitate the prompt and accurate clearance and settlement of securities transactions.

ii. Qualifying Liquid Resources

Proposed Rule 17Ad-22(e)(7)(ii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it holds qualifying liquid resources sufficient to meet the minimum liquidity resource requirement in each relevant currency for which the covered clearing agency has payment obligations owed to clearing members.¹⁹⁹ The Commission is also proposing to add Rule 17Ad-22(a)(15) to define "qualifying liquid resources."²⁰⁰ For any covered clearing agency, in each relevant currency, qualifying liquid resources would include three types of assets:

- Cash held either at the central bank of issue or at creditworthy commercial banks;²⁰¹

¹⁹⁹ See proposed Rule 17Ad-22(e)(7)(ii), *infra* Part 0. In other words, if payment obligations were denominated in U.S. dollars, the minimum liquidity resource requirement would refer to a U.S. dollar amount.

²⁰⁰ See proposed Rule 17Ad-22(a)(15), *infra* Part 0.

²⁰¹ The Commission preliminarily believes that the creditworthiness of commercial banks should be considered by a covered clearing agency after considering its particular circumstances and those of its members and the markets which it services. Accordingly, in complying with the requirements of proposed Rule 17Ad-22(e)(7) and proposed Rule 17Ad-22(a)(15), a covered clearing agency's policies and procedures for determining whether a commercial bank is creditworthy may reflect such circumstances.

¹⁹⁵ Cf. PFMI Report, *supra* note 1, at 56 (discussing Principle 6, margin).

¹⁹⁶ See proposed Rule 17Ad-22(e)(6)(vii), *infra* Part 0; see also *supra* Part 0 and *infra* Part 0 (defining "conforming model validation" under proposed Rule 17Ad-22(a)(5) and providing the definition text, respectively).

¹⁹⁷ See *supra* Part 0 (describing a person who is free from influence in the context of the policy and procedure requirement for an annual conforming model validation addressing credit risk).

¹⁹⁸ See proposed Rule 17Ad-22(e)(7), *infra* Part 0; see also *infra* Parts 0-0.

- Assets that are readily available and convertible into cash through either:
 - Prearranged funding arrangements without material adverse change limitations, such as committed lines of credit, foreign exchange swaps, and repurchase agreements, or
 - Other prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the board of directors of the covered clearing agency following a review conducted for this purpose not less than annually; and
 - Other assets that are readily available and eligible for pledging to (or conducting other appropriate forms of transactions with) a relevant central bank, if the covered clearing agency has access to routine credit at such central bank.²⁰²

The Commission preliminarily believes that this requirement is appropriate, given the risks that its size, operation, and importance pose to the U.S. securities markets, and will help ensure that a covered clearing agency has sufficient liquid resources, as determined by stress testing, to effect settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios.²⁰³ Furthermore, the Commission preliminarily believes this requirement is appropriate given the specific circumstances of the U.S. securities markets. U.S. securities markets are among the largest and most liquid in the world, and CCPs operating in the United States are also among the largest in the world.²⁰⁴ The resulting peak liquidity demands of CCPs are therefore proportionately large on both an individual and an aggregate basis, and the ability of CCPs to satisfy a requirement limiting qualifying liquid resources to committed facilities could be constrained by the capacity of traditional liquidity sources in the U.S. banking sector in certain circumstances. Therefore, the Commission is proposing to include in the definition of qualifying liquid resources other prearranged

funding arrangements determined to be highly reliable even in extreme but plausible market conditions.

For similar reasons, the Commission preliminarily believes it is appropriate to include in the definition of qualifying liquid resources assets that a central bank would permit a covered clearing agency to use as collateral, to the extent such covered clearing agency has access to routine credit at such central bank.²⁰⁵ The Commission preliminarily notes that, although covered clearing agencies do not currently have access to routine credit at Federal Reserve Banks, potential registrants that could be determined to be covered clearing agencies in the future may be operating in a jurisdiction where access to routine credit is provided to the potential registrant by that jurisdiction's central bank.²⁰⁶

With regard to assets convertible into cash, the Commission preliminarily notes that the mere ownership of assets that a covered clearing agency may consider readily available and also may consider readily convertible into cash, based on factors such as the historical volume of trading in a particular market for such asset, may not be sufficient alone to make the assets count towards qualifying liquid resources unless one of the above-referenced prearranged funding arrangements is in place under which the covered clearing agency would receive cash in a timely manner. The prearranged funding arrangements would be in place to cover any shortfall. The Commission, however, preliminarily considers committed funding arrangements to be reasonably capable of being established by covered clearing agencies in the relevant commercial lending markets and other funding arrangements to be reasonably capable of being assessed for reliability by the boards of directors of covered clearing agencies following consideration of the relevant circumstances, and therefore preliminarily believes the standard to be sufficiently clear to allow for it to be interpreted and applied in practice by

covered clearing agencies. Further, the Commission preliminarily notes that, in complying with proposed Rule 17Ad-22(e)(7), covered clearing agencies should consider the lower of the value of the assets capable of being pledged and the amount of the commitment (or the equivalent availability under a highly reliable prearranged facility) as the amount that counts towards qualifying liquid resources in the event there is any expected difference between the two.²⁰⁷ This may occur, for example, where the terms of the arrangement provide for over-collateralization or where the covered clearing agency lacks sufficient qualifying assets to make full use of an otherwise qualifying liquidity facility.

In defining the proposed requirements for qualifying liquid resources, the Commission preliminarily believes that it would be appropriate to provide covered clearing agencies with the flexibility to use highly reliable funding arrangements in addition to committed arrangements for purposes of using assets other than cash to meet the proposed requirements of Rule 17Ad-22(e)(7).²⁰⁸ The Commission preliminarily believes that limiting the funding arrangements that are included within the definition of qualifying liquid resources to committed funding arrangements may not be necessary or appropriate in determining liquidity requirements for a covered clearing agency operating in the U.S. securities markets and expanding the concept of qualifying liquid resources to include other highly reliable funding arrangements is necessary and appropriate to ensure the proper functioning of covered clearing agencies as required by the Exchange Act.

For similar reasons, the Commission preliminarily believes it is appropriate to include in the definition of qualifying liquid resources assets that a central

²⁰² See *id.* The Commission notes that such access to routine credit at a relevant central bank and the collateral required by such central bank to be posted to secure a loan may be determined at the discretion of the central bank, and accordingly the practical application of the definition of qualifying liquid resources would be subject to variation based on those decisions. The Commission preliminarily believes that inclusion of assets eligible for pledging to any central bank, as opposed to only to a Federal Reserve Bank, is appropriate because, in practice, a covered clearing agency may need access to liquid resources in currencies other than U.S. dollars.

²⁰³ Cf. PFMI Report, *supra* note 1, at 60 (discussing Principle 7, liquidity risk).

²⁰⁴ See *infra* notes 561–562 and accompanying text (discussing the volume of transactions processed by U.S. clearing agencies).

²⁰⁵ See ICMA Eur. Repo Council, The Interconnectivity of Central and Commercial Bank Money in the Clearing and Settlement of the European Repo Market, at 10–11 (Sept. 2011) (indicating that access to central bank credit is important and may cause banks to use either central bank settlement services or cash settlement banking services of a commercial bank, depending on availability of, and the terms of, central bank credit).

²⁰⁶ See Peter Allsopp, Bruce Summers & John Veale, The Evolution of Real-Time Gross Settlement: Access, Liquidity and Credit, and Pricing, at 15 (World Bank, Feb. 2009) (indicating that CCPs in the Eurozone have access to central bank settlement account services and routine credit).

²⁰⁷ The Commission notes that, based on the types of assets that may be considered qualifying liquid resources, for purposes of complying with proposed Rule 17Ad-22(e)(7)(ii), factors that may be relevant for a covered clearing agency to take into account include (i) the portion of its default fund that is held as cash, (ii) the portion of its default fund that is held as securities, (iii) the portion of any excess default fund contributions held as cash that could be used by the covered clearing agency to meet liquidity needs, (iv) the portion of any excess default fund contributions held as securities that could be used by the covered clearing agency to meet liquidity needs, (v) the amount at any given time of securities or cash delivered by members that a covered clearing agency may be able to use to meet liquidity needs upon the default of a member, and (vi) the borrowing limits under any committed funding arrangement.

²⁰⁸ Cf. PFMI Report, *supra* note 1, at 57 (discussing Principle 7, liquidity risk, at Key Consideration 5).

bank would permit a covered clearing agency to use as collateral.²⁰⁹ The Commission notes that, although routine discount window borrowing at a Federal Reserve Bank is currently not available to covered clearing agencies, this provision will provide covered clearing agencies with additional flexibility in meeting the liquidity requirements of proposed Rule 17Ad–22(e)(7), should routine credit at a Federal Reserve Bank become available in the future.²¹⁰

iii. Access to Account Services at a Federal Reserve Bank or Other Relevant Central Bank

Proposed Rule 17Ad–22(e)(7)(iii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it uses accounts and services at a Federal Reserve Bank, pursuant to Section 806(a) of the Clearing Supervision Act,²¹¹ or other relevant central bank, when available and where determined to be practical by the board of directors of the covered clearing agency, in order to enhance its management of liquidity risk.²¹² The Commission notes that the proposed rule would not require using Federal Reserve Bank or other relevant central bank account services; it would only require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to consider and determine when and in what circumstances it chooses to do so, when the services are available and when considered to be practical. The Commission preliminarily believes that covered clearing agencies should be encouraged to actively consider using Federal Reserve Bank or other central bank accounts and services, as this is a valuable new tool made available under the Clearing Supervision Act.²¹³ The Commission preliminarily believes,

however, that it should also permit the use of commercial banks by covered clearing agencies holding cash as collateral or for other services related to clearance and settlement activity, even when comparable services are available from a central bank.

iv. Liquidity Providers

Proposed Rule 17Ad–22(e)(7)(iv) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it undertakes due diligence to confirm that it has a reasonable basis to believe each of its liquidity providers, whether or not such liquidity provider is a clearing member, has sufficient information to understand and manage the liquidity provider's liquidity risks, and the capacity to perform as required under its commitments to provide liquidity.²¹⁴

The Commission preliminarily intends for the term “due diligence” to have the same meaning as what this term is commonly understood to mean by market participants. Consequently, in order to comply with the requirements of proposed Rule 17Ad–22(e)(7) and to form a reasonable basis regarding a liquidity provider's understanding and management of liquidity risks and operational capacity, the Commission expects a covered clearing agency would ordinarily not rely on representations of the liquidity provider to this effect and instead conduct its own investigation into the liquidity provider's business. A covered clearing agency should consider implementing due diligence procedures that provide a sufficient basis for its belief, given its business and the nature of its liquidity providers. Procedures for purposes of forming a reasonable basis could include, for example, interviewing the liquidity provider's staff and reviewing both public and non-public documents that would allow the covered clearing agency to gather information about relevant factors, including but not limited to the strength of the liquidity provider's financial condition, its risk management capabilities, and its internal controls.

The Commission preliminarily believes that proposed Rule 17Ad–22(e)(7)(iv) is appropriate because a covered clearing agency needs to soundly manage its relationships with liquidity providers given the risks posed to the U.S. securities markets by its size, operation, and importance. In addition, Proposed Rule 17Ad–22(e)(7)(iv) would reinforce proposed Rule 17Ad–

22(e)(7)(ii) and the definition of qualifying liquid resources in proposed Rule 17Ad–22(a)(15), which contemplate potential reliance on liquidity providers where a covered clearing agency would seek to use assets other than cash for purposes of complying with proposed Rule 17Ad–22(e)(7)(ii) and would need to transact with a liquidity provider to convert such assets into cash. Should a committed or prearranged funding arrangement prove to be unreliable at the time a covered clearing agency needs to utilize it because of liquidity problems at the lender itself, this failure may trigger a liquidity problem at the covered clearing agency, which would raise systemic risk concerns for the U.S. securities markets. These types of problems at a liquidity provider, by indirectly affecting a covered clearing agency, could undermine the national system for the prompt and accurate clearance and settlement of securities transactions.

v. Maintenance and Annual Testing of Liquidity Provider Procedures and Operational Capacity

Proposed Rule 17Ad–22(e)(7)(v) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that the covered clearing agency maintains and, on at least an annual basis,²¹⁵ tests with each liquidity provider, to the extent practicable, its procedures and operational capacity for accessing each type of relevant liquidity resource.²¹⁶

In addition, proposed Rule 17Ad–22(e)(7)(v) would reinforce proposed Rule 17Ad–22(e)(7)(ii) and the definition of qualifying liquid resources in proposed Rule 17Ad–22(a)(15), which contemplate potential reliance on liquidity providers where a covered clearing agency would seek to use assets other than cash for purposes of complying with proposed Rule 17Ad–22(e)(7)(ii) and would need to transact with a liquidity provider to convert such assets into cash. If procedures or operational capacity for accessing liquidity under committed or prearranged funding arrangements fail to function as planned and in a timely manner, the covered clearing agency may fail to meet its payment obligation, which would raise systemic risk concerns for the U.S. markets and could undermine the national system for the prompt and accurate clearance and

²⁰⁹ The Commission also preliminarily notes that the term “central bank” in the proposed definition of “qualifying liquid resources” is not limited to a Federal Reserve Bank, and accordingly covered clearing agencies based in or operating outside of the United States that have access to routine credit at other central banks would be able to take that into consideration when assessing the amount of their qualifying liquid resources.

²¹⁰ See *infra* Part 0 (discussing the relative cost of central bank credit). Section 806(b) of the Clearing Supervision Act states that the Board may authorize a Federal Reserve Bank to provide to a designated FMU discount and borrowing privileges only in unusual and exigent circumstances, subject to certain conditions. See 12 U.S.C. 5465(b).

²¹¹ See 12 U.S.C. 5465(a).

²¹² See proposed Rule 17Ad–22(e)(7)(iii), *infra* Part 0.

²¹³ See Clearing Agency Standards Release, *supra* note 5, at 66268–69 & n.535.

²¹⁴ See proposed Rule 17Ad–22(e)(7)(iv), *infra* Part 0.

²¹⁵ The Commission preliminarily believes that an annual cycle is appropriate for the reasons described in Part 0.

²¹⁶ See proposed Rule 17Ad–22(e)(7)(v), *infra* Part 0.

settlement of securities transactions. Proper preparation for a liquidity shortfall scenario could also promote members' confidence in the ability of a covered clearing agency to perform its obligations, which can mitigate the risk of contagion during stressed market conditions. The Commission preliminarily believes this is important for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets.

The Commission preliminarily believes that testing of access to liquidity resources could include efforts by a covered clearing agency to verify that a liquidity provider is able to provide the relevant liquidity resource in the manner intended under the terms of the funding arrangement and without undue delay, such as, for example, promptly funding a draw on the covered clearing agency's credit facility. Testing procedures could include, for example, test draws funded by the liquidity provider or tests of electronic connectivity between the covered clearing agency and the liquidity provider. The Commission recognizes that testing with liquidity providers may not always be practicable in the absence of committed liquidity arrangements.

The Commission preliminarily believes the proposed requirement that testing of a covered clearing agency's access to liquidity be conducted at least annually with each liquidity provider to be a reasonable step to ensure the objectives of the Exchange Act are achieved in practice. The Commission understands such tests are routinely performed currently by certain registered clearing agencies but are subject to variation due, in part, to the absence of a regulatory requirement and the incremental time and attention needed to conduct the tests. The Commission preliminarily anticipates the effect of the proposed rule will be to require the development of more uniform liquidity testing practices by covered clearing agencies, and has accordingly proposed to allow covered clearing agencies to assess the practicability of such testing to provide them with reasonable flexibility to design the tests to suit the circumstances of the covered clearing agency and its particular liquidity arrangements.

vi. Testing the Sufficiency of Liquid Resources

Proposed Rule 17Ad-22(e)(7)(vi)(A) through (C) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to

determine the amount and regularly test the sufficiency of the liquid resources held for purposes of meeting the minimum liquid resource requirement of proposed Rule 17Ad-22(e)(7)(i) by (A) conducting a stress test of its liquidity resources at least once each day using standard and predetermined parameters and assumptions;²¹⁷ (B) conducting a comprehensive analysis of the existing stress testing scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources, and considering modifications to ensure they are appropriate for determining the covered clearing agency's identified liquidity needs and resources in light of current and evolving market conditions at least once each month;²¹⁸ and (C) conducting a comprehensive analysis of the existing stress testing scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources more frequently when products cleared or markets served display high volatility or become less liquid, when the size or concentration of positions held by participants increases significantly, or in other circumstances described in the covered clearing agency's policies and procedures.²¹⁹ Proposed Rule 17Ad-22(e)(7)(vi)(D) would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to result in reporting the results of the analyses performed under proposed Rule 17Ad-22(e)(7)(vi)(B) and (C) to appropriate decision makers, including the risk management committee or board of directors, at the covered clearing agency for use in evaluating the adequacy of and adjusting its liquidity risk management framework.

The Commission preliminarily believes that proposed Rules 17Ad-22(e)(7)(vi)(A) through (D) would require a covered clearing agency to take reasonable steps to ensure the adequacy of liquid resources in practice. Given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, in addition to the potential consequences to the U.S. financial system of a failure of a covered clearing agency, the Commission preliminarily believes that requiring a covered clearing agency to

devote additional time and attention to testing the sufficiency of its liquid resources, relative to a registered clearing agency generally, is appropriate. The Commission preliminarily believes that the requirements in proposed Rule 17Ad-22(e)(7)(vi) are appropriate for testing the sufficiency of liquid resources of covered clearing agencies because, in certain market conditions, such as periods of high volatility or diminished liquidity, existing stress scenarios, models, or underlying parameters may no longer be valid or appropriate. For example, covered clearing agencies may have adjusted their financial resources models following the 2008 financial crisis to account for larger debt, equity, and credit market shocks than would have been contemplated by those models prior to the crisis. Accordingly, the Commission preliminarily believes that specific policies and procedures specifying actions to be taken by covered clearing agencies to maintain sufficient liquid resources would contribute to the safe functioning of the covered clearing agency as required by the Exchange Act,²²⁰ and that requiring periodic feedback and analysis on the strength of liquidity risk management policies and procedures would improve the reliability of those policies and procedures. The Commission also preliminarily believes that covered clearing agencies should have the flexibility to use stress scenarios that are appropriately calibrated to the markets in which they operate and that they can be revised over time as those markets change. Proper preparation for a liquidity shortfall scenario could also promote a participant's confidence in the ability of a covered clearing agency to perform its obligations, which can mitigate the risk of undue disruption during stressed market conditions.

One of the appropriate methods of preparation by a covered clearing agency would be, in the Commission's preliminary view, the testing of the sufficiency of liquidity that it might need under certain extreme but plausible parameters and assumptions. The Commission preliminarily believes that conducting stress testing of liquidity would allow a covered clearing agency to understand its level of resilience and adjust its operations accordingly to address areas of inadequacy. The Commission preliminarily believes that by testing under extreme but plausible scenarios,

²¹⁷ The Commission preliminarily believes that a daily cycle is appropriate for the reasons described in Part 0.

²¹⁸ The Commission preliminarily believes that a monthly cycle is appropriate for the reasons described in Part 0.

²¹⁹ See proposed Rule 17Ad-22(e)(7)(vi), *infra* Part 0.

²²⁰ See notes 54-56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

covered clearing agencies, and in particular those designated systemically important, would be better prepared in the event that equivalent or similar scenarios actually occurred.

vii. Annual Conforming Model Validation

Proposed Rule 17Ad–22(e)(7)(vii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to result in performing an annual or more frequent conforming model validation of its liquidity risk models.²²¹

The Commission preliminarily believes that such annual conforming model validation would provide feedback on the performance of such liquidity risk models conducted by a qualified person who is free from influence from the persons responsible for the development or operation of the liquidity risk model, as contemplated by the definition of “conforming model validation” in proposed Rule 17Ad–22(a)(5), and incorporate alternative liquidity risk management methodologies into their models as appropriate. Generally, the Commission preliminarily considers that a person is free from influence when that person does not perform functions associated with the clearing agency’s models (except as part of the annual model validation) and does not report to a person who performs these functions. Preliminarily, the Commission would not expect policies and procedures adopted pursuant to this proposed requirement to require the clearing agency to detach model review from model development or to maintain two separate quantitative teams. By reacting to such feedback, a covered clearing agency may improve the functioning of its liquidity risk model. The Commission notes that misspecified or miscalibrated liquidity risk models may lead to errors in decision making. The Commission preliminarily believes that the proposed rule is appropriate following consideration of the Exchange Act requirements discussed above²²² and the risks that a covered clearing

agency’s size, operation, and importance pose to the U.S. securities markets.

viii. Address Liquidity Shortfalls and Seek To Avoid Unwinding Settlement

Proposed Rule 17Ad–22(e)(7)(viii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to address foreseeable liquidity shortfalls that would not be covered by its liquid resources and seek to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations.²²³ The Commission preliminarily believes advance planning by a covered clearing agency with regard to liquidity shortfalls could further enhance the covered clearing agency’s ability to perform its payment obligations without delay and therefore support the ability of the clearing agency’s participants to function without disruption. Foreseeable liquidity shortfalls could include, for example, potential shortfalls that can be identified through testing a covered clearing agency’s financial resources in a manner consistent with the policies and procedures requirements in proposed Rule 17Ad–22(e)(7)(vi). The Commission recognizes that foreseeable liquidity shortfalls could occur even when a covered clearing agency is in compliance with the proposed requirements of Rule 17Ad–22(e)(7), such as when, for example, the covered clearing agency is unable to obtain liquidity pursuant to a prearranged funding arrangements that are uncommitted. The Commission preliminarily believes the proposed requirement is appropriate for covered clearing agencies given the risks that a covered clearing agency’s size, operation, and importance pose to the U.S. securities markets and are consistent with the Exchange Act requirements discussed above.²²⁴

ix. Replenishment of Liquid Resources

Proposed Rule 17Ad–22(e)(7)(ix) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to describe its process for replenishing any liquid resources that it may employ during a stress event.²²⁵ The Commission preliminarily believes a covered

clearing agency should specifically contemplate and memorialize its expectations for replenishing its financial resources when they are depleted so that its ability to withstand repeated stress events, such as multiple market shocks or sequential defaults of multiple participants is clearly understood and reflected in its planning for such events. The Commission preliminarily believes that the proposed requirement is appropriate given the risks that a covered clearing agency’s size, operation, and importance pose to the U.S. securities markets and is consistent with the Exchange Act requirements discussed above.²²⁶

x. Feasibility Analysis for “Cover Two”

Proposed Rule 17Ad–22(e)(7)(x) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it, at least once a year, evaluates the feasibility of maintaining sufficient liquid resources to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions if the covered clearing agency provides CCP services and is either systemically important in multiple jurisdictions or a clearing agency involved in activities with a more complex risk profile.²²⁷

Rule 17Ad–22 does not currently provide specific requirements regarding the sizing and testing of liquid resources or what types of financial resources would qualify as liquid. However, the financial crisis of 2008 demonstrated the plausibility of the default of two large participants in a clearing agency over a brief period.²²⁸ Accordingly, the Commission preliminarily believes that its proposed approach is appropriate, given the need for more stringent financial resource requirements for a covered clearing agency due to the risks that its size, operation, and importance

²²¹ See proposed Rules 17Ad–22(a)(5) and (e)(7)(vii), *infra* Part 0. The Commission notes that, in contrast to proposed Rules 17Ad–22(a)(5) and (e)(7)(vii), Rule 17Ad–22(b)(4) requires only a model validation for margin models and does not specify the general elements of a model validation. See *supra* note 167 and accompanying text.

In addition, the Commission preliminary believes that an annual cycle is appropriate for the reasons described in Part 0.

²²² See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

²²³ See proposed Rule 17Ad–22(e)(7)(viii), *infra* Part 0.

²²⁴ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

²²⁵ See proposed Rule 17Ad–22(e)(7)(ix), *infra* Part 0.

²²⁶ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

²²⁷ See proposed Rule 17Ad–22(e)(7)(x), *infra* Part 0.

²²⁸ See Clearing Agency Standards Release, *supra* note 5, at 66235–36 (noting that the financial crisis of 2008 demonstrated the plausibility of the default of two large participants in a clearing agency over a brief period).

pose to the U.S. securities markets, and is consistent with the Exchange Act requirements discussed above.²²⁹ The Commission also believes that such financial resources must be robust enough to accommodate the risks that are particular to each market served and accordingly believes that a covered clearing agency should have the flexibility to determine that different standards are appropriate in different markets, given the variable nature and risks associated with the products cleared.²³⁰

The Commission also preliminarily believes that, with greater emphasis being placed on the role of CCPs in the financial system, the requirement in proposed Rule 17Ad-22(e)(7)(x) for CCPs to review and consider the feasibility of meeting a higher liquidity risk management standard is appropriate. While Rule 17Ad-22(e)(7)(x) would impose on certain covered clearing agencies' policies and procedures requirements to conduct an annual analysis of the feasibility of maintaining "cover two" for liquidity, such covered clearing agencies would not be mandated to adopt a "cover two" approach regarding liquidity risk management. The responsibility for such a determination would remain with the boards of directors of covered clearing agencies following a review of the information produced pursuant to proposed Rule 17Ad-22(e)(7)(x).

The Commission preliminarily believes that it may be appropriate for a covered clearing agency that provides CCP services to maintain liquidity coverage at levels higher than other clearing agencies due to the heightened need to ensure the safe operation of covered clearing agencies given their importance to the U.S. financial markets and the risks attributable to the products they clear, but also that covered clearing agencies not subject to a "cover two" requirement should have flexibility to evaluate the results of an annual feasibility study and to make their own determinations as to whether a "cover two" approach to liquidity risk management is necessary or appropriate. Furthermore, the Commission notes that if, following completion of a feasibility study as contemplated in proposed Rule 17Ad-22(e)(7)(x), a covered clearing agency makes a determination to move beyond "cover one" for liquidity that would be

required under proposed Rule 17Ad-22(e)(7)(i), such covered clearing agency would not be limited to sizing its qualifying liquid resources to cover the default of its two largest participant families. In such case, the covered clearing agency could select a level of liquid resources exceeding "cover one" that it deems most appropriate to the management of liquidity risk, which could be either less than, equal to, or more than "cover two."

Based on its supervisory experience, the Commission also preliminarily believes that, in sizing its liquid resources to exceed "cover one," a covered clearing agency may take into account a variety of factors, including, but not limited to, (i) the business model of the covered clearing agency, such as a utility model (which may be also referred to as an "at cost" model) versus a for-profit model; (ii) diversification of its members' business models as they impact the members' ability to supply liquidity to the covered clearing agency; (iii) concentration of membership of the covered clearing agency, as the breadth of the membership may affect the ability to draw liquidity from members; (iv) levels of usage of the covered clearing agency's services by members, as the concentration of demand on the covered clearing agency's services may bear upon potential liquidity needs; (v) the relative concentration of members' market share in the cleared products; (vi) the degree of alignment of interest between member ownership of the covered clearing agency and the provision of funding to the covered clearing agency; and (vii) the nature of, and risks associated with, the products cleared by the covered clearing agency.

g. Request for Comments

The Commission generally requests comments on all aspects of proposed Rules 17Ad-22(e)(4), (5), (6), and (7) and proposed Rules 17Ad-22(a)(5), (6), (14), (15), (17), (18), and (19). In particular, the Commission requests comments on the following issues:

- Has the Commission provided sufficient guidance for Rule 17Ad-22(e)(4) regarding the meaning of the requirement to cover credit exposures to each participant "fully with a high degree of confidence"? Has the Commission provided sufficient guidance regarding the meaning of the requirement to maintain the financial resources required under proposed Rules 17Ad-22(e)(4)(i) through (iii), as applicable, "in combined or separately maintained clearing or guaranty funds"? Has the Commission provided sufficient guidance regarding the use of "high

volatility" and "become less liquid"? Why or why not?

- Is the Commission's proposed requirement to cover credit exposures to each participant "fully with a high degree of confidence" in proposed Rule 17Ad-22(e)(4) appropriate? Why or why not?

- Should a covered clearing agency's policies and procedures provide for the measurement of credit exposures more frequently than once per day? Why or why not? If so, how frequently? What factors should be considered in determining the minimum frequency?

- Should the Commission require a covered clearing agency's policies and procedures to limit the assets it accepts as collateral to those with low credit, liquidity, and market risks? Why or why not? Has the Commission provided sufficient guidance regarding what constitutes "low credit, liquidity, and market risks"? Why or why not? If not, what additional guidance should the Commission consider providing?

- Should the Commission require a covered clearing agency's policies and procedures to set and enforce appropriately conservative haircuts and concentration limits if the covered clearing agency requires collateral to manage its or its participants' credit exposure? Why or why not? Has the Commission provided sufficient guidance on what would constitute "appropriately conservative haircuts and concentration limits"? Why or why not? Should the Commission adopt different standards? If so, what should those standards be? Please explain in detail.

- Are there any other requirements that should be included in proposed Rule 17Ad-22(e)(5) to facilitate policies and procedures that address collateral? Why or why not? Are there any requirements that should be removed? Why or why not? For instance, should the Commission require policies and procedures that avoid concentrated holdings of any particular kind of asset, such as those that would significantly impair the covered clearing agency's ability to liquidate such assets quickly without significant adverse price effects? Should the Commission require policies and procedures that avoid concentrated holdings under certain conditions?

- Has the Commission provided sufficient guidance for Rule 17Ad-22(e)(6) regarding "margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market"? Has the Commission provided sufficient guidance regarding what a "reliable" source of timely price data is? Why or

²²⁹ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

²³⁰ See generally Clearing Agency Standards Release, *supra* note 5, at 66234–36 (describing a "cover two" requirement for credit risk).

why not? Should the Commission use a different standard? If so, what should that standard be? Please explain in detail.

- Is the requirement in proposed Rule 17Ad–22(e)(6)(i) regarding policies and procedures reasonably designed to result in a margin system that at a minimum considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market appropriate? Why or why not?

- Is the Commission's approach in proposed Rule 17Ad–22(e)(6)(iii), requiring a covered clearing agency's policies and procedures to calculate margin sufficient to cover its potential future exposure to participants, and the definition of "potential future exposure" in proposed Rule 17Ad–22(a)(14) to mean the "maximum exposure estimated to occur at a future point in time with an established single-tailed confidence interval of at least 99% with respect to the estimated distribution of future exposure" appropriate and sufficiently clear? Why or why not?

- Are there any other requirements that should be included in proposed Rule 17Ad–22(e)(6) to facilitate policies and procedures that address margin? Why or why not? For instance, should the Commission require policies and procedures that address minimum liquidation periods for products cleared by covered clearing agencies? Why or why not?

- Has the Commission provided sufficient guidance for Rule 17Ad–22(e)(7) regarding what constitutes the "relevant currency" in holding qualifying liquid resources? Has the Commission provided sufficient guidance regarding the "due diligence" with respect to liquidity providers? Has the Commission provided sufficient guidance regarding what constitutes "foreseeable" liquidity shortfalls? Why or why not?

- Has the Commission provided sufficient guidance regarding what constitutes "regularly" testing the sufficiency of liquid resources under proposed Rule 17Ad–22(e)(7)(vi)? Why or why not? How frequently should a covered clearing agency test the sufficiency of its liquid resources? Please explain.

- Does the set of minimum requirements for policies and procedures under proposed Rule 17Ad–22(e)(7) sufficiently address liquidity risks? Why or why not? Should the Commission adopt other requirements for addressing liquidity risk?

- Is the proposed definition of "qualifying liquid resources" under

Rule 17Ad–22(a)(15) accurate, appropriate, and sufficiently clear given the requirements proposed? Why or why not? Should all types of assets be subject to prearranged funding arrangements? Should the proposed definition distinguish among them by asset, product type, or liquidity? Are there alternative definitions the Commission should consider?

- Is the meaning of the term "due diligence" under Rule 17Ad–22(7)(iv) sufficiently clear? Why or why not?

- Is the proposed definition of "systemically important in multiple jurisdictions" under Rule 17Ad–22(a)(19) accurate, appropriate, and sufficiently clear given the requirements proposed? Why or why not? Are there alternative definitions the Commission should consider? How should the Commission assess another regulator or jurisdiction's determination that a covered clearing agency is systemically important in multiple jurisdictions? Please explain.²³¹

- Is the Commission's proposed approach to "cover one" and "cover two" with respect to credit risk appropriate? Should the Commission expand or contract the scope of covered clearing agencies subject to a "cover two" requirement beyond those systemically important in multiple jurisdictions or those involved in activities with a more complex risk profile? Why or why not? Is the "cover two" approach, in which the covered clearing agency must have policies and procedures requiring financial resources sufficient to cover the default of the two participant families that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions, appropriate? Should the Commission require policies and procedures that provide for financial resources in excess of "cover two"? Why or why not? If so, what would be the potential costs and benefits?

- Is the Commission's proposed approach to "cover one" and "cover two" with respect to liquidity risk appropriate? Should the Commission require policies and procedures that would provide for maintaining qualifying liquid resources equal to "cover two," rather than policies and procedures for a feasibility analysis with regard to "cover two"? Why or why not?

- Should the Commission include more specific requirements for policies and procedures regarding stress testing that take into account, for example,

²³¹ For additional requests for comments relating to proposed Commission determinations under Rule 17Ab2–2, see Part 0.

relevant peak historic price volatilities, shifts in other market factors such as price determinants and yield curves, multiple defaults over various time horizons, simultaneous pressures in funding and asset markets, or a spectrum of forward-looking stress scenarios in a variety of extreme but plausible market conditions? Why or why not?

- Is the requirement to require policies and procedures for reporting the results of a conforming sensitivity analysis to the appropriate decision makers at the covered clearing agency appropriate? Why or why not? Has the Commission sufficiently described who the appropriate decision makers are? Please explain.

- Do any of the proposed rules for financial risk management differentiate between clearing agencies based on factors that should not be determinative, *i.e.* whether a clearing agency is covered or uncovered, whether a clearing agency is systemically important in multiple jurisdictions, involved in activities with a more complex risk profile, or neither, and whether the clearing agency provides CCP services for security-based swaps or other securities? Should the Commission consider other factors in determining which clearing agencies should be subject to the proposed requirements?

5. Proposed Rule 17Ad–22(e)(8): Settlement Finality

Proposed Rule 17Ad–22(e)(8) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to define the point at which settlement is final no later than the end of the day on which the payment or obligation is due and, where necessary or appropriate, intraday or in real time.²³²

Rule 17Ad–22(d)(12) currently requires registered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that final settlement occurs no later than the end of the settlement day and to require that intraday or real-time finality be provided where necessary to reduce risks.²³³ The Commission preliminarily believes that defining settlement finality with specific reference to the day on

²³² See proposed Rule 17Ad–22(e)(8), *infra* Part 0.

²³³ See 17 CFR 240.17Ad–22(d)(12); *see also* Clearing Agency Standards Release, *supra* note 5, at 66255–56. Rule 17Ad–22(d)(12) focuses on achieving settlement on the particular settlement date associated with the securities transaction or on an intraday or real-time basis (*i.e.*, delivery versus payment) where those additional steps are necessary to reduce risks. *See* Clearing Agency Standards Release, *supra* note 5, at 66256.

which the payment or obligation is due is appropriate because it better reflects the prevailing international convention and accordingly helps to ensure that covered clearing agencies can facilitate transactions globally.²³⁴ Because of the similarity between proposed Rule 17Ad-22(e)(8) and Rule 17Ad-22(d)(12), the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures to comply with the proposed rule.²³⁵

As with Rule 17Ad-22(d)(12), the Commission preliminarily believes that proposed Rule 17Ad-22(e)(8) is appropriate for covered clearing agencies, given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, for the following reasons. First, the Commission preliminarily believes that defining the point at which settlement is final may assist in the potential wind-down of a member in the event of insolvency because it provides the covered clearing agency with information regarding the member's open positions. As an example, clearly defining the point at which settlement is final might include establishing a cut-off point after which unsettled payments, transfer instructions, or other obligations may not be revoked by a clearing member. Clearly defining the point at which settlement is final could also provide to clearing members the necessary guidance from the covered clearing agency to permit extensions for members with operating problems. For example, the covered clearing agency may establish rules governing the approval and duration of such extensions.

Second, the Commission preliminarily believes that a covered clearing agency's policies and procedures should require completing final settlement no later than the end of the day on which the payment or obligation is due and that practices creating material uncertainty regarding when final settlement will occur or permit the back-dating or "as of" dating of a transaction that settles after the end of the day on which the payment or obligation is due would not comply with this requirement. The Commission preliminarily believes that final settlement has the effect of reducing the buildup of exposures between clearing members and the clearing agency, and final settlement no later than the end of the day on which the payment or obligation is due limits these exposures to the change in price between valuation

and the end of the day. Accordingly, deferring final settlement beyond the end of the day on which the payment or obligation is due would allow these exposures to increase in size, thereby creating the potential for credit and liquidity pressures for members and other market participants and potentially increasing systemic risk.

Third, the Commission preliminarily believes that a covered clearing agency's policies and procedures, where necessary and appropriate, should require intraday or real-time finality in order to reduce risk in circumstances where uncertainty regarding finality may impede the clearing agency's ability to facilitate prompt and accurate clearance and settlement, cause the clearing agency's members to fail to meet their obligations, or otherwise disrupt the securities markets. The Commission preliminarily believes that such efforts would be necessary and appropriate when, for example, the risks in question are material or when the opportunity to require intraday or real-time finality is available and it would be reasonable, whether in economic or other terms, to do so.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(8). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to define the point at which settlement is final no later than the end of the day on which the payment or obligation is due, as in the proposed rule, or no later than the end of the settlement date, as in existing Rule 17Ad-22(d)(12) applicable to registered clearing agencies? Please explain.

- What changes, if any, would be created by the proposed requirements for settlement finality? Does the proposed rule affect certain, identifiable categories of market participants differently than others, such as smaller entities or entities with limited operations in the United States? If so, how?

- Are there operational, legal, or regulatory impediments to intraday or real-time settlement finality? Will the proposed standard make it harder for covered clearing agencies to conduct certain types of business for which intraday or real-time finality may be difficult? Are any additional rules or regulations needed to encourage intraday or real-time finality to reduce risks?

- Are there circumstances when the requirements of intraday, real-time, or end-of-day settlement finality proposed

by the rule are not feasible or are not beneficial? If so, in what circumstances?

6. Proposed Rule 17Ad-22(e)(9): Money Settlements

Proposed Rule 17Ad-22(e)(9) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure it considers conducting its money settlements in central bank money, where available and determined to be practical by the board of directors of the covered clearing agency, and minimizes and manages credit and liquidity risk arising from conducting its money settlements in commercial bank money if central bank money is not used by the covered clearing agency.²³⁶ Rule 17Ad-22(e)(9) contains requirements similar to those applied to registered clearing agencies under Rule 17Ad-22(d)(5), but would additionally require a covered clearing agencies to have policies and procedures for conducting money settlement in central bank money.²³⁷ Because this is the only requirement that differs between proposed Rule 17Ad-22(e)(9) and existing Rule 17Ad-22(d)(5), the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures.²³⁸

As with Rule 17Ad-22(d)(5), the Commission is proposing Rule 17Ad-22(e)(9) to provide assurance that funds transfers are final when effected.²³⁹ The Commission preliminarily believes that the proposed requirement for policies and procedures for conducting money settlement in central bank money would, in addition, help to further reduce the risk that financial obligations related to the activities of a covered clearing agency are not settled in a timely manner or discharged with

²³⁶ See proposed Rule 17Ad-22(e)(9), *infra* Part 0.

The Commission notes that, in some cases, for example, the use of central bank money may not be practical, as direct access to all central bank accounts and payment services may not be available to certain clearing agencies or members, and, for clearing agencies working under different currencies, certain central bank accounts may not be operational at the time money settlements occur.

²³⁷ In full, Rule 17Ad-22(d)(5) requires registered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to employ money settlement arrangements that eliminate or strictly limit the clearing agency's settlement bank risks, such as credit and liquidity risks from the use of banks to effect money settlements with its participants. See 17 CFR 240.17Ad-22(d)(5); see also Clearing Agency Standards Release, *supra* note 5, at 66249-50.

²³⁸ See *supra* Part 0 (noting the anticipated effect of the proposed rule) and *infra* Part 0 (describing the current practices at registered clearing agencies regarding settlement).

²³⁹ See proposed Rule 17Ad-22(e)(9), *infra* Part 0.

²³⁴ Cf. PFMI Report, *supra* note 1, at 64.

²³⁵ See *supra* Part 0.

finality because settlement in central bank money eliminates settlement risk within the jurisdiction of the central bank.²⁴⁰

The Commission notes that there are a number of arrangements that a covered clearing agency could employ to meet the requirements under the proposed rule. For example, pursuant to the Clearing Supervision Act, designated clearing agencies may obtain access to account services at a Federal Reserve Bank.²⁴¹ The Commission preliminarily believes, however, that it may be appropriate for covered clearing agencies to use commercial banks for conducting money settlements even when comparable services are available from a central bank, and therefore the proposed rule would permit a covered clearing agency to decide for itself which service to use in those circumstances. If central bank account services are not available or used, then the covered clearing agency should consider establishing criteria for use of commercial banks to effect money settlements with its participants that address such commercial banks' regulation and supervision, creditworthiness, capitalization, access to liquidity, and operational reliability. In addition, a covered clearing agency also could seek to ensure that its legal agreements with such commercial settlement banks support such risk-reduction principles and commercial settlement bank criteria, including through provisions providing that funds transfers to the covered clearing agency are final when effected.

The proposed rule would also permit a covered clearing agency to use multiple settlement banks in order to monitor and manage concentration of payments among its commercial settlement banks. In those circumstances, policies and procedures would be required to consider the degree to which concentration of a covered clearing agency's exposure to a commercial settlement bank is affected or increased by multiple relationships with the settlement bank, including (i) where the settlement bank is also a participant in the covered clearing agency, or (ii) where the settlement bank provides back-up liquidity resources to the covered clearing agency.

²⁴⁰ See ICMA Eu. Repo Council, *supra* note 205, at 8–9 (noting that central bank money “can be regarded as completely safe in the jurisdiction of the central bank” and listing a number of advantages attributable to central bank money).

²⁴¹ See 12 U.S.C. 5465(a); see also *supra* Parts 0 and 0 (discussing access to account services at a Federal Reserve Bank, or other relevant central bank, pursuant to proposed Rules 17Ad–22(e)(5) and (7), respectively).

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad–22(e)(9). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to conduct its money settlements in central bank money, where available and determined to be practical by the board of directors of the covered clearing agency? Why or why not? Has the Commission provided sufficient guidance on what would be “practical” in this context? Why or why not?

- Should the Commission require a covered clearing agency's policies and procedures to minimize and manage credit and liquidity risk arising from conducting its money settlements in commercial bank money if central bank money is not used by the covered clearing agency? Why or why not?

- Are there other requirements that the Commission should apply to money settlements, such as requiring policies and procedures with respect to the minimum number of banks that a covered clearing agency may use to effect money settlements with its participants in order to avoid reliance on a small number of such banks? Should the Commission require policies and procedures specifying the characteristics of financial institutions that may be used by clearing agencies for settlement purposes? Why or why not?

- Should the Commission require a covered clearing agency's policies and procedures to establish and monitor adherence to criteria based on high standards for the covered clearing agency's settlement banks? For example, should the Commission require that criteria to consider the applicable regulatory and supervisory frameworks, creditworthiness, capitalization, access to liquidity, and operational reliability? Why or why not?

- Should the Commission require a covered clearing agency's policies and procedures to monitor and manage the concentration of credit and liquidity exposures to its commercial settlement banks? Why or why not?

- Should rules for money settlements established by the Commission be uniform for all types of money settlements, or are there circumstances in which it would be appropriate for covered clearing agencies to accept a higher degree of money settlement risk, such as when transacting in certain product categories or with certain types of customers? Why or why not?

7. Proposed Rule 17Ad–22(e)(10): Physical Delivery Risks

Proposed Rule 17Ad–22(e)(10) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish and maintain transparent written standards that state its obligations with respect to the delivery of physical instruments and operational practices that identify, monitor, and manage the risk associated with such physical deliveries.²⁴²

The proposed requirement is similar to the requirement applicable to registered clearing agencies in Rule 17Ad–22(d)(15), but the proposed rule also requires that such standards be transparent at covered clearing agencies.²⁴³ Considering the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, the Commission preliminarily believes that the proposed new requirement for transparent standards is appropriate. Physical delivery may require the involvement of multiple parties, including the clearing agency itself, its members, customers, custodians, and transfer agents, and failures to deliver physical instruments can threaten the integrity and smooth functioning of the financial system. By requiring policies and procedures to include transparent written standards at covered clearing agencies, the proposed rule helps to mitigate physical delivery risks.

The Commission preliminarily believes that the proposed requirement for a covered clearing agency to maintain transparent written standards that state its obligations with respect to physical deliveries would help to ensure that members and their customers have information that is likely to enhance their understanding of their rights and responsibilities with respect to using the clearance and settlement services of a covered clearing agency.²⁴⁴ The Commission

²⁴² See proposed Rule 17Ad–22(e)(10), *infra* Part 0.

²⁴³ Registered clearing agencies are currently subject to existing Rule 17Ad–22(d)(15), which requires them to establish, implement, maintain and enforce written policies and procedures reasonably designed to state to its participants the clearing agency's obligations with respect to physical deliveries and identify and manage the risks from these obligations. See 17 CFR 240.17Ad–22(d)(15); see also Clearing Agency Standards Release, *supra* note 5, at 66257–58.

²⁴⁴ The Commission is proposing additional requirements regarding disclosures to participants and disclosure generally, pursuant to proposed Rules 17Ad–22(e)(1) (legal risk), (e)(2) (governance), and (e)(23) (disclosure of rules, key procedures, and market data). See *infra* Parts 0, 0, and 0, respectively.

preliminarily believes that such information, when available to members and their customers through the covered clearing agency's policies and procedures, would promote a shared understanding regarding physical delivery practices between the covered clearing agency and its members. The requirement for policies and procedures with transparent written standards may further facilitate prompt and accurate clearance and settlement and mitigate physical delivery risks.

The Commission acknowledges that practices regarding physical delivery vary based on the types of assets that a covered clearing agency settles.²⁴⁵ A covered clearing agency would be required, however, to state clearly which asset classes it accepts for physical delivery and the procedures surrounding the delivery of each. The Commission notes that there are a number of arrangements that a covered clearing agency could employ pursuant to the requirements of the proposed rule. For example, if a covered clearing agency takes physical delivery of securities from its members in return for payments of cash, then it should inform its members of the extent of the clearing agency's obligations to make payment. The Commission envisions that one possible approach a covered clearing agency could take in fulfillment of the proposed requirement would be to employ policies and procedures that clearly state any obligations it incurs to members for losses incurred in the delivery process. In addition, its policies and procedures could clearly state rules or obligations regarding definitions for acceptable physical instruments, the location of delivery sites, rules for storage and warehouse operations, and the timing of delivery.

The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage the risks that arise

in connection with their obligations for physical deliveries.²⁴⁶ The Commission notes that this is similar to the requirement for a registered clearing agency's policies and procedures to identify and manage the risks from its obligations in Rule 17Ad-22(d)(15).²⁴⁷ As with Rule 17Ad-22(d)(15), the Commission believes that requiring a clearing agency's policies and procedures to identify, monitor, and manage these risks facilitates its ability to deal preemptively with potential issues with physical delivery, in line with Exchange Act requirements to facilitate prompt and accurate clearance and settlement and the safeguarding of assets.²⁴⁸

The Commission preliminarily notes that certain risks associated with physical deliveries could stem from operational limitations with respect to assuring receipt of and processing of physical deliveries. Other operational risks may relate to personnel, which can be mitigated by having policies and procedures designed to review and assess the qualifications of potential employees, including reference and background checks and employee training, among other things. Further operational risks include theft, loss, counterfeiting, and deterioration of or damage to assets.²⁴⁹ Insurance coverage may be one way to mitigate such risk of theft, loss, counterfeiting, fraud, and damage to assets. Other appropriate methods to identify, monitor, and manage risks related to delivery and storage of physical assets may include ensuring records of physical assets received and held accurately reflect holdings and that employee duties for such recordkeeping for and holding of physical assets are separated.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(10). In addition, the Commission requests comments on the following specific issue:

- Should the Commission require a covered clearing agency's policies and procedures to establish and maintain transparent written standards that state its obligations with respect to the delivery of physical instruments? Why or why not? Are there physical delivery obligations that a covered clearing agency's policies and procedures should

not be required to state through transparent written standards? If so, please explain.

8. Proposed Rule 17Ad-22(e)(11): Central Securities Depositories

Proposed Rule 17Ad-22(e)(11) would apply only to a covered clearing agency providing CSD services (hereinafter a "covered CSD" in this part).²⁵⁰ Proposed Rule 17Ad-22(e)(11)(i) would require a covered CSD to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain securities in an immobilized or dematerialized form for their transfer by book entry, ensure the integrity of securities issues, and minimize and manage the risks associated with the safekeeping and transfer of securities.²⁵¹ While Rule 17Ad-22(d)(10) similarly requires registered clearing agencies that provide CSD services to have policies and procedures reasonably designed to immobilize or dematerialize securities certificates and transfer them by book entry to the greatest extent possible,²⁵² proposed Rule 17Ad-22(e)(11) would also require a covered CSD to have policies and procedures that ensure the integrity of securities issues, and minimize and manage the risks associated with the safekeeping and transfer of securities. The Commission preliminarily believes these additional requirements are appropriate for covered CSDs given the risks that a covered CSD's size, operation, and importance pose to the U.S. securities markets.

Like existing Rule 17Ad-22(d)(10), proposed Rule 17Ad-22(e)(11)(i) would, among other things, require a covered CSD to have policies and procedures to maintain securities in an immobilized or dematerialized form for transfer by book entry.²⁵³ The Commission

²⁵⁰ See proposed Rule 17Ad-22(a)(3), *infra* Part 0 (defining "central securities depository services"). In the United States, DTC is currently the only registered clearing agency that provides CSD services.

This definition is currently codified at 17 CFR 240.17Ad-22(a)(2). See *supra* note 61 (noting that 17 CFR 240.17Ad-22(a) is being revised to incorporate additional terms).

²⁵¹ See proposed Rule 17Ad-22(e)(11), *infra* Part 0.

²⁵² In full, existing Rule 17Ad-22(d)(10) requires registered clearing agencies that provide CSD services to establish, implement, maintain and enforce written policies and procedures reasonably designed to immobilize or dematerialize securities certificates and transfer them by book entry to the greatest extent possible. See 17 CFR 240.17Ad-22(d)(10); see also Clearing Agency Standards Release, *supra* note 5, at 66253-54.

²⁵³ Immobilization refers to any circumstance where an investor does not receive a physical certificate upon the purchase of shares or is required to physically deliver a certificate upon the

²⁴⁵ The proposed rule would provide covered clearing agencies with flexibility to achieve clear and transparent standards but would necessarily require an approach that provides sufficient notice to its participants regarding the covered clearing agency's obligations. See *infra* Parts 0 and 0 (discussing a covered clearing agency's disclosure obligations pursuant to proposed Rule 17Ad-22(e)(23) and providing proposed rule text).

The Commission notes that CDS employing the contractual term "physical delivery" or similar language, which upon an event of default are settled by "physical delivery" of the instrument (as such terms are used in the agreement) to the protection seller by the protection buyer are not within the scope of this rule merely because of such contractual terminology where they are not delivered in paper form (but are delivered through book entry or electronic transfer).

²⁴⁶ See proposed Rule 17Ad-22(e)(10), *infra* Part 0.

²⁴⁷ See *supra* note 243.

²⁴⁸ See 15 U.S.C. 78q-1(b)(3)(F).

²⁴⁹ In addition, the Commission is proposing Rule 17Ad-22(e)(17) to establish minimum requirements for operational risk management. See *infra* Parts 0 and 0 (further discussing the proposed requirements and providing proposed rule text).

preliminarily believes this approach would continue to promote a reduction in securities transfer processing costs, as well as the risks associated with securities settlement and custody, such as destruction or theft, by removing the need to hold and transfer many, if not most, physical certificates.²⁵⁴ In addition, the Commission preliminarily believes the requirement would continue to promote prompt and efficient settlement processes through the potential for increased automation and may also help reduce the risk of error and delays in securities processing. The Commission also preliminarily believes the proposed rule would, like Rule 17Ad-22(d)(10), further the objectives in Section 17A of the Exchange Act requiring the Commission to end the physical movement of securities certificates in connection with settlement among brokers and dealers.²⁵⁵ Further, the Commission preliminarily believes that the proposed rule, by continuing to facilitate book-entry transfer, may also continue to facilitate the use of exchange-of-value settlement systems, which help to reduce settlement risk pursuant to proposed Rule 17Ad-22(e)(12).²⁵⁶

As with Rule 17Ad-22(d)(10), the Commission notes that the proposed

sale of shares. Dematerialization is the process of eliminating physical certificates as a record of security ownership.

The Commission notes that, while registered clearing agencies that provide CSD services are already subject to this requirement under Rule 17Ad-22(d)(10), the Commission is proposing Rule 17Ad-22(e)(10) as part of a comprehensive set of rules for regulating covered clearing agencies. Because Rule 17Ad-22(d)(10) already contains this requirement, however, the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures to comply with this requirement under the proposed rule. *See supra* Part 0.

²⁵⁴ By concentrating the location of physical securities in a CSD, clearing agencies are able to achieve efficiencies in clearance and settlement by streamlining transfer. Virtually all mutual fund securities, government securities, options, and municipal bonds in the United States are dematerialized and most of the equity and corporate bonds in the U.S. market are either immobilized or dematerialized. While the U.S. markets have made great strides in achieving immobilization and dematerialization for institutional and broker-to-broker transactions, many industry representatives believe that the small percentage of securities held in certificated form imposes unnecessary risk and expense to the industry and to investors. *See* Exchange Act Release No. 34-49405 (Mar. 11, 2004), 69 FR 12922, 12933 (Mar. 18, 2004).

²⁵⁵ *See* 15 U.S.C. 78q-1(e).

²⁵⁶ *See infra* Parts 0 (discussing proposed Rule 17Ad-22(e)(12) for exchange-of-value settlement systems) and 0 (noting that the economic effect of book-entry transfer in a delivery versus payment system is to allow securities to be credited to an account immediately upon debiting the account for the payment amount and that it thereby helps reduce trade failures).

requirement for policies and procedures to cover maintaining securities in an immobilized form is not intended to prohibit a covered CSD from holding physical securities certificates on behalf of its members for purposes other than to facilitate immobilization where such securities currently continue to exist in paper form. In this regard, the Commission believes it would be useful to describe three relevant features of the current U.S. market. First, in order for securities to be offered and sold publicly, the offer or sale of the securities generally must be registered with the Commission or subject to an exemption from registration.²⁵⁷ Securities sold in an exempt transaction may be subject to restrictions. For example, securities acquired from the issuer in a transaction not involving any public offering are restricted securities,²⁵⁸ are subject to restrictions on resale, often bear legends that discuss such restrictions, and often are in paper certificate form in current market practice. The restrictions on such securities may make more complex the immobilization or ultimate dematerialization of these paper certificates. For instance, registered CSDs in the United States currently do not provide book-entry transfer for all restricted securities.²⁵⁹

Second, U.S. law generally does not provide for a federal corporate law or corporate charter. Instead, states currently permit corporations to issue stock certificates to registered owners. While the market in the United States has made advances in immobilizing and dematerializing securities, no federal statute or regulation prohibits the issuance of paper certificates to registered owners of a class of securities registered under the Exchange Act or companies that file periodic reports with the Commission. Accordingly, the Commission's rules do not prohibit, and in some respects contemplate, the issuance of securities certificates.²⁶⁰ As a result, some registered owners may hold securities in paper certificate form.

Third, some broker-dealers in the United States no longer operate vaults in which to hold securities certificates registered in the names of their customers where such customers seek a

third-party to physically hold their certificates. In such cases, broker-dealers (without an in-house vault) may utilize the vault services of the CSD of which they are a participant in order to be able to offer such custody service to their customers.

The Commission also notes that the proposed rule is not intended to alter the following practices in the U.S. market. Proposed Rule 17Ad-22(e)(11) would not prohibit a covered CSD from providing custody-only services for purposes not intended to promote immobilization to facilitate street name transfer but solely to hold these securities for third parties. Likewise, proposed Rule 17Ad-22(e)(11) would not prohibit a covered CSD from holding American depositary shares in custody.²⁶¹

In addition, the Commission preliminarily believes that the policies and procedures of a covered CSD should be required to ensure the integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities, given the risks that a covered CSD's size, operation, and importance pose to the U.S. securities markets, for the following reasons. First, the preservation of the rights of issuers and holders of securities is necessary for the orderly functioning of the securities markets.²⁶² The integrity of a securities issue can be undermined, for instance, if a covered CSD does not prohibit overdrafts and debit balances in securities accounts, which can create unauthorized issuances of securities that undermine the integrity of the covered CSD's services. Second, minimizing and managing the risks associated with the safekeeping and transfer of securities promotes risk management policies and procedures that address custody risk.²⁶³

In addition, the Commission is proposing the requirements described below. Although Rule 17Ad-22(d)(10) does not include similar requirements, the Commission anticipates that, based on the current practices of registered CSDs in the United States, a registered

²⁶¹ Issuers of American depositary receipts ("ADRs"), whether in programs sponsored or unsponsored by a foreign issuer, may hold the underlying shares of the foreign issuer (which may be in paper certificate form and are commonly referred to as American depositary shares) to which the ADRs relate in the ultimate custody of a covered CSD.

²⁶² The Commission is proposing additional requirements under Rule 17Ad-22(e)(11) to further address the integrity of securities issues. *See infra* Part 0.

²⁶³ The Commission is proposing additional requirements under Rule 17Ad-22(e)(11) to further address custody risk at covered CSDs. *See infra* Part 0.

²⁵⁷ *See* 15 U.S.C. 77e.

²⁵⁸ *See* 17 CFR 230.144(a)(3).

²⁵⁹ *See* 17 CFR 230.144A; *see also* Exchange Act Release No. 34-59384 (Feb. 11, 2009), 74 FR 7941 (Feb. 20, 2009); DTC, Operational Arrangements, Secs. I.A.2 & I.B.5 (Jan. 2012), available at <http://www.dtcc.com/>.

²⁶⁰ In the absence of a federal or state requirement, an issuer could limit its issuance of certain types of securities to book-entry only form through its own charter, bylaws, or policies.

CSD may need to make only limited changes to update its policies and procedures to comply with the below proposed requirements.²⁶⁴

a. Controls To Safeguard the Rights of Securities Issuers and Holders and Prevent the Unauthorized Creation or Deletion of Securities

Proposed Rule 17Ad-22(e)(11)(ii) would require a covered CSD to establish, implement, maintain and enforce written policies and procedures reasonably designed to implement internal auditing and other controls to safeguard the rights of securities issuers and holders and prevent the unauthorized creation or deletion of securities.

The Commission preliminarily believes that the proposed requirement to safeguard the rights of issuers and holders is appropriate because, while issuers and holders may not be participants in a covered CSD, they access its services through covered CSD immobilization or dematerialization of securities and thus a failure to safeguard securities by the CSD may adversely affect issuers or holders, including for example by creating legal problems related to unauthorized issuance of securities, dilution of a holder's ownership interest or the holder's claim on the security as beneficial owner where holding indirectly through a member of the CSD.

As noted above, the preservation of the rights of securities issuers and holders is necessary for the orderly functioning of the securities markets. Accordingly, the Commission preliminarily believes the proposed rule is appropriate to help ensure that a covered clearing agency can verify that its records are accurate and provide a complete accounting of its securities issues.

b. Periodic and at Least Daily Reconciliation of Securities Maintained

Proposed Rule 17Ad-22(e)(11)(ii) would require a covered CSD to establish, implement, maintain and enforce written policies and procedures reasonably designed to conduct periodic and at least daily reconciliation of securities issues it maintains.²⁶⁵ The Commission preliminarily believes that the proposed requirement to reconcile on a daily basis securities maintained

would (i) support the safeguarding of securities because, through such internal control procedures, accurate record-keeping is promoted and thereby safe, accurate, and effective clearing and settlement is also promoted, and (ii) further benefit issuers and holders, as discussed above, by potentially preventing unauthorized issuance of securities, dilution of a holder's positions, or the holder's claim on the security as beneficial owner where holding indirectly through a member of the CSD.

The Commission notes that CSDs in the United States currently do not provide registrar or transfer agent services to record name owners of securities. CSD services that facilitate book-entry transfer are limited to holding jumbo/global certificates in custody or, through sub-custodian relationships with the transfer agent for a particular issuer via the Fast Automated Securities Transfer ("FAST") system, which is used to maintain jumbo/global record ownership position balances of the CSD's holdings in a particular issue.²⁶⁶ In both cases, custody or sub-custody facilitates book-entry transfer for ultimate beneficial owners as the CSD credits and debits the accounts of its members, which then maintain records of ownership and send account statements to their customers that are the ultimate beneficial owners. Since the registrar maintaining the security holder list for an issuer is not the CSD, the daily reconciliation requirement applicable to a covered CSD reconciling CSD ownership positions (that facilitate book-entry transfer for ultimate beneficial owners) against the record of such CSD ownership positions on the security holder list could not be done solely in-house but would require the CSD to coordinate with the registrar maintaining the security holder list for each issue that has been immobilized.²⁶⁷

c. Protect Assets Against Custody Risk

Proposed Rule 17Ad-22(e)(11)(iii) would require a covered CSD to

establish, implement, maintain and enforce written policies and procedures reasonably designed to protect assets against custody risk through appropriate rules and procedures consistent with relevant laws, rules, and regulations in jurisdictions where it operates.²⁶⁸ The Commission preliminarily believes the proposed requirement to address custody risk is appropriate because a covered CSD faces risks of negligence, misuse of assets, fraud, record-keeping or administrative failures, loss, destruction, damage, natural disaster, and theft or other crime regarding assets held in custody. The Commission preliminarily believes that the proposed rule would further support Section 17A(b)(3)(F) of the Exchange Act, which requires the rules of a clearing agency to assure the safeguarding of securities and funds that are in the custody or control of the clearing agency or for which it is responsible.²⁶⁹

Such custody risk may be related to physical delivery risk, which proposed Rule 17Ad-22(e)(10) would require a covered clearing agency's policies and procedures to identify, monitor, and manage.²⁷⁰ Operational risks may also be implicated, including those relating to personnel, which can be mitigated by having policies and procedures designed to review and assess the qualifications of potential employees, including reference and background checks and employee training, among other things. Additional operational risks include theft, loss, counterfeiting, and deterioration of or damage to assets.²⁷¹ Insurance coverage may be one way to mitigate such risk of theft, loss, counterfeiting, fraud, and damage to assets. Other appropriate methods to monitor and manage custody risks may include ensuring records of securities held in custody accurately reflect holdings and that employee duties for such recordkeeping for and holding of securities are separated.²⁷²

²⁶⁸ See proposed Rule 17Ad-22(e)(11), *infra* Part 0. For example, in the United States, additional safekeeping requirements may apply under state law. See, e.g., N.Y. UCC Law 8-504 (requires securities intermediaries, including clearing corporations, to exercise due care in accordance with reasonable commercial standards to obtain and maintain the financial asset).

²⁶⁹ See 15 U.S.C. 78q-1(b)(3)(F).

²⁷⁰ See *supra* Part 0 and *infra* Part 0 (discussing the requirements under proposed Rule 17Ad-22(e)(10) and providing proposed rule text).

²⁷¹ The Commission is also proposing Rule 17Ad-22(e)(17) to establish minimum standards for operational risk management. See *infra* Parts 0 and 0.

²⁷² The Commission is also proposing Rule 17Ad-22(e)(16) to establish minimum standards for custody and investment risk. See *infra* Parts 0 and 0.

²⁶⁴ See *infra* Parts 0 (discussing the current practices of registered CSDs in the United States) and 0 (discussing the anticipated economic effect of the proposed rule).

²⁶⁵ See proposed Rule 17Ad-22(e)(11), *infra* Part 0. The Commission preliminarily believes that daily reconciliation is appropriate for the reasons described in Part 0.

²⁶⁶ For a description of DTC's rules relating to FAST, see Exchange Act Release Nos. 34-64191 (Apr. 5, 2011), 76 FR 20061 (Apr. 11, 2011); 34-61800 (Mar. 30, 2010), 75 FR 17196 (Apr. 5, 2010); 34-60196 (Jun. 30, 2009), 74 FR 33496 (Jul. 13, 2009); 34-46956 (Dec. 2, 2002), 67 FR 77115 (Dec. 16, 2002); 34-31941 (Mar. 3, 1993); 34-21401 (Oct. 16, 1984); 34-14997 (Jul. 26, 1978); and 34-13342 (Mar. 8, 1977).

²⁶⁷ Commonly, the entity performing the registrar and transfer services for an issue would be the same. Both functions are functions that place an entity within the definition of "transfer agent" pursuant to Section 3(a)(25) of the Exchange Act and the related regulatory regime for transfer agents. See 15 U.S.C. 78c(a)(25).

The Commission also preliminarily notes that increased dematerialization would not eliminate the applicability of the requirement to protect assets against custody risk. When held in electronic custody through accounting entries, such as through electronic sub-custody of the CSD global/jumbo record ownership position with a transfer agent via FAST, assets may nevertheless remain subject to operational risks and may be subject to variations of such risks, such as hacking or digital piracy, that are different from those risks faced with respect to paper certificates.

d. Request for Comments

The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(11). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered CSD's policies and procedures to maintain securities in an immobilized or dematerialized form for their transfer by book entry? Why or why not? Are there any circumstances under which this would be inappropriate? Please explain.

- Should the Commission require a covered CSD's policies and procedures to ensure the integrity of securities issues? Why or why not?

- Should the Commission require a covered CSD's policies and procedures to protect assets against custody risk through appropriate rules and procedures consistent with relevant laws, rules, and regulations in jurisdictions where it operates? Why or why not?

- Are there any other requirements that should be included in the proposed rule to promote sound practices at covered CSDs? For instance, should the Commission require a covered CSD's policies and procedures to include provisions to identify, measure, monitor, and manage its risks from other activities that it may perform? Should the Commission require a covered CSD's policies and procedures to employ a robust system that ensures segregation between the CSD's own assets and the securities of its participants and segregation among the securities of participants? Why or why not?

9. Proposed Rule 17Ad-22(e)(12): Exchange-of-Value Settlement Systems

Proposed Rule 17Ad-22(e)(12) would apply to transactions cleared by a covered clearing agency that involve the settlement of two linked obligations.²⁷³ The proposed rule would require a

covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other, regardless of whether the covered clearing agency settles on a gross or net basis and when finality occurs.²⁷⁴ The Commission preliminarily believes that the proposed rule is appropriate to help reduce the potential that delivery of a security is not appropriately matched with payment for the security, thereby impairing a covered clearing agency's ability to facilitate prompt and accurate clearance and settlement.

Rule 17Ad-22(d)(13) similarly requires that a registered clearing agency's policies and procedures be reasonably designed to eliminate principal risk by linking securities transfers to funds transfers in a way that achieves delivery versus payment ("DVP").²⁷⁵ though it does not specify that settlement should occur regardless of whether the clearing agency settles on a gross or net basis and when finality occurs. Because this is the only provision that differs between proposed Rule 17Ad-22(e)(12) and existing Rule 17Ad-22(d)(13), the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures.²⁷⁶

The Commission notes that ensuring settlement finality only when settlement of the corresponding obligation is final—regardless of whether a covered clearing agency settles on a gross or net basis—may require corresponding policies and procedures that address legal, contractual, operational, and other risks.²⁷⁷ Given the risks that the size, operation, and importance of covered clearing agencies pose to the U.S. securities markets, the Commission preliminarily believes that this requirement is appropriate for covered clearing agencies.

Market confidence, in addition to public confidence more generally, hinges in large part on the dependability and promptness of the clearing and settlement systems underlying a given

market. If CCPs are unable to promptly and fully give to clearing members access to funds due, they and other market participants may lose confidence in the settlement process.²⁷⁸

As under Rule 17Ad-22(d)(13), a covered clearing agency can link securities transfers to funds transfers and mitigate principal risk in connection with settlement through DVP settlement mechanisms. DVP is achieved in the settlement process when the mechanisms facilitating settlement ensure that delivery occurs only if payment occurs.²⁷⁹ DVP eliminates the risk that a party would lose some or its entire principal because securities were delivered without payments being confirmed. The Commission notes that DVP settlement mechanisms are prevalent among registered clearing agencies because they eliminate principal risk and reduce the settlement risk that arises in a securities transaction. A counterparty default absent a DVP settlement mechanism may cause substantial losses and liquidity pressures. Further, a settlement default could result in high replacement costs because the unrealized gain on an unsettled contract or the cost of replacing the original contract at market prices may change rapidly during periods of market stress.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(12). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to, if the covered clearing agency settles transactions that involve the settlement of two linked obligations, eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other? Should the Commission impose this policy and procedure requirement regardless of whether the covered clearing agency settles on a gross or net basis, as proposed? Should the Commission impose this policy and procedure requirement regardless of

²⁷⁸ See Arthur Levitt, Chairman, U.S. Securities and Exchange Commission, *Speeding Up Settlement: The Next Frontier*, Remarks before the Symposium on Risk Reduction in Payments, Clearance and Settlement Systems (Jan. 26, 1996), available at <http://www.sec.gov/news/speech/speecharchive/1996/spch071.txt>.

²⁷⁹ See BIS, *Delivery Versus Payment in Securities Settlement Systems* (Sept. 1992), available at <http://www.bis.org/publ/cps06.pdf>. Three different DVP models can be differentiated according to whether the securities and/or funds transfers are settled on a gross (trade-by-trade) basis or on a net basis. Proposed Rule 17Ad-22(e)(10), *supra* Part 0 and *infra* Part 0, would establish minimum requirements for physical deliveries.

²⁷³ See proposed Rule 17Ad-22(e)(12), *infra* Part 0.

²⁷⁴ See *id.*

²⁷⁵ See 17 CFR 240.17Ad-22(d)(13); see also Clearing Agency Standards Release, *supra* note 5, at 66256.

²⁷⁶ See *supra* Part 0.

²⁷⁷ See *supra* Parts 0–0 and *infra* Parts 0 and 0 (discussing proposed rules establishing minimum standards for legal risk and governance arrangements, requiring a comprehensive risk management framework, requiring minimum standards for operational risk management, and providing proposed rule text in each case, respectively).

when finality occurs, as proposed? Why or why not?

- Does the proposed rule affect certain identifiable categories of covered clearing agencies differently than others, such as clearing agencies with more diversified post-trade services as compared to clearing agencies that specialize in fewer activities? If so, how? How should the proposed rule account for these differences?

- Are there operational or legal impediments to implementing the proposed rule? Would the proposed rule make it more difficult for covered clearing agencies to conduct certain types of business that may require a longer settlement cycle, for reasons outside of their control? Are any additional rules or regulations needed to support achievement of the proposed rule?

- Are there circumstances when ensuring that the settlement of an obligation is final if and only if the settlement of the corresponding obligation is final is not feasible or practicable? If so, when?

10. Proposed Rule 17Ad–22(e)(13): Participant-Default Rules and Procedures

Proposed Rule 17Ad–22(e)(13) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that the covered clearing agency has the authority and operational capacity to take timely action to contain losses and liquidity demands and continue to meet its obligations in the event of a participant default.²⁸⁰ Because Rule 17Ad–22(d)(11) currently requires a registered clearing agency's policies and procedures to meet substantially the same requirements,²⁸¹ the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures to comply with the proposed rule.²⁸²

As with Rule 17Ad–22(d)(11), the Commission believes that proposed

Rule 17Ad–22(e)(13) is appropriate given the importance of having established procedures in the event a covered clearing agency faces a member default. The proposed rule would continue to provide certainty and predictability to market participants about the measures a clearing agency will take in the event of a participant default as default procedures, among other things, are meant to reduce the likelihood that a default by one or more participants will disrupt the clearing agency's operations. By establishing, implementing, maintaining and enforcing such policies and procedures, a covered clearing agency should be in a better position to continue providing its services in a manner that promotes prompt and accurate clearance and settlement during times of market stress.²⁸³ Accordingly, a covered clearing agency that has financial and operational triggers for default would need to ensure these are clearly defined.²⁸⁴ In addition, where triggers are not automatic through the application of objective standards or thresholds, the discretion afforded a covered clearing agency to declare defaults would need to be clearly defined.²⁸⁵ For example, a clear definition may include defining which person or group exercises discretionary authority in the event of default and providing specific examples of when the exercise of discretion is appropriate.

The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that it can take timely action to contain losses and liquidity pressures and to continue meeting its obligations when due in the event of a member default.²⁸⁶ Default procedures are meant to reduce the

likelihood that a default by a member, or multiple members, will disrupt the covered clearing agency's operations. Based on its supervisory experience, the Commission preliminarily believes such policies and procedures would address, among other things, the following: (i) Accessing credit facilities; (ii) managing (which may include hedging open positions and funding collateral positions it is not prudent to close out immediately), transferring (such as through allocation or auction to other members) and/or closing out a defaulting member's positions; and (iii) transferring and/or liquidating applicable collateral. By employing policies and procedures that are designed to permit a covered clearing agency to take actions to contain losses and liquidity pressures it faces in the event of a participant default while continuing to meet its obligations, a covered clearing agency should be in a better position to continue providing its services in a manner that promotes accurate clearance and settlement during times of market stress.

A covered clearing agency should also have the operational capacity to comply with the proposed requirements to contain losses. The Commission preliminarily believes that the following measures would help promote such operational capacity: (i) Establishing training programs for employees involved in default matters to ensure policies are well implemented; (ii) developing a communications strategy for communicating with stakeholders, including the Commission, concerning defaults; and (iii) making sure the proper tools and resources (whether these are personnel or other) required are available to close out, transfer, or hedge open positions of a defaulting member promptly even in the face of rapid market movements.²⁸⁷

In addition, based on its supervisory experience, the Commission preliminarily believes that a covered clearing agency's default procedures would generally include the following: (i) The action that may be taken (e.g., exercising mutualization of losses); (ii) who may take those actions (e.g., the division of responsibilities when clearing agencies operate links to other clearing agencies); (iii) the scope of the actions that may be taken (e.g., any limits on the total losses that would be mutualized); (iv) potential changes to the normal settlement practices, should these changes be necessary in extreme

²⁸³ The Commission is also proposing Rule 17Ad–22(e)(23) to require disclosure of rules, key procedures, and market data to members, market participants, and in certain circumstances the public. See *infra* Parts 0 and 0 (discussing the proposed rule and providing rule text, respectively).

²⁸⁴ An operational default may occur when a participant is not able to meet its obligations due to an operational problem, such as a failure in information technology systems. The Commission is proposing Rule 17Ad–22(e)(17) to establish minimum standards for operational risk management. See *infra* Parts 0 and 0 (discussing the proposed rule and providing rule text, respectively).

²⁸⁵ In this regard, the Commission notes that policies and procedures regarding participant default must satisfy the requirement for legal certainty in proposed Rule 17Ad–22(e)(1). See *supra* Part 0.

²⁸⁶ See proposed Rule 17Ad–22(e)(13), *infra* Part 0. A clearing agency may be able to contain liquidity pressures it faces by taking actions to secure additional sources of liquidity or limiting transactions that potentially serve to drain liquidity resources.

²⁸⁰ See proposed Rule 17Ad–22(e)(13), *infra* Part 0. The Commission is proposing Rule 17Ad–22(e)(13) as part of a comprehensive set of rules for regulating covered clearing agencies that is consistent with and comparable to other domestic and international standards for FMIs.

²⁸¹ Rule 17Ad–22(d)(11) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish default procedures that ensure that the clearing agency can take timely action to contain losses and liquidity pressures and to continue meeting its obligations in the event of a participant default. See 17 CFR 240.17Ad–22(d)(11); see also Clearing Agency Standards Release, *supra* note 5, at 66254–55.

²⁸² See *supra* Part 0.

²⁸⁷ See *supra* note 284 and accompanying text. The Commission has also proposed Regulation Systems Compliance and Integrity (“Regulation SCI”) to establish requirements for operational capacity. See *infra* note 326 and accompanying text.

circumstances, to ensure timely settlement; (v) the management of transactions at different stages of processing; (vi) the sequencing of actions; (vii) the roles, obligations, and responsibilities of the various parties, including non-defaulting members; (viii) the mechanisms to address a covered clearing agency's obligations to non-defaulting members (e.g., the process for clearing trades guaranteed by the covered clearing agency to which a defaulting member is a party); and (ix) the mechanisms to address the defaulting member's obligations to its customers (e.g., the process for dealing with a defaulting member's accounts).

In addition, proposed Rule 17Ad–22(e)(13) would include the requirements described below, for which no comparable requirements under Rule 17Ad–22(d) are applicable to registered clearing agencies. The Commission preliminarily believes the proposed requirements are appropriate for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets.

a. Address Allocation of Credit Losses

Proposed Rule 17Ad–22(e)(13)(i) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to address the allocation of credit losses it may face if its collateral and other resources are insufficient to fully cover its credit exposures, including the repayment of any funds the covered clearing agency may borrow from liquidity providers.²⁸⁸

The Commission preliminarily believes that this requirement is appropriate because requiring that policies and procedures address key aspects of the allocation of credit losses would provide certainty and predictability about the measures available to a covered clearing agency in the event of a default. Such certainty and predictability would facilitate the orderly handling of member defaults and would enable members to understand their obligations to the covered clearing agency in extreme circumstances. In some instances, managing a member default may involve hedging open positions, funding collateral so that the positions can be closed out over time, or both. A covered clearing agency may also decide to auction or allocate open positions to its participants. To the extent possible, the Commission believes a covered clearing agency would allow non-defaulting

members to continue to manage their positions in the ordinary course. By addressing the allocation of credit losses, the covered clearing agency would have policies and procedures intended to address the resolution of a member default where its collateral and other financial resources are insufficient to cover credit losses.

b. Describe Replenishment of Financial Resources

Proposed Rule 17Ad–22(e)(13)(ii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to describe its process to replenish any financial resources it may use following a member default or other event in which use of such resources is contemplated.²⁸⁹

The Commission preliminarily believes this requirement is appropriate because the absence of procedures to replenish resources may undermine a covered clearing agency's ability to contain losses and liquidity pressures. The Commission also preliminarily believes that a covered clearing agency's rules and procedures to draw on financial resources will support the proposed rule's other requirements to contain losses and liquidity pressures. Such procedures commonly specify the order of use of different types of resources, including (i) assets provided by the defaulting member (such as margin or other collateral), (ii) the guaranty fund of the covered clearing agency, (iii) capital calls on members, and (iv) credit facilities. In addition, the Commission preliminarily believes a covered clearing agency could satisfy the proposed requirement by having policies and procedures that describe (i) how resources that have been depleted as a result of a member default would be replenished over time and (ii) what burdens a non-defaulting member may bear.

c. Test Default Procedures Annually and Following Material Changes

Proposed Rule 17Ad–22(e)(13)(iii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require its members and, when practicable, other stakeholders to participate in the testing and review of its default procedures, including any close out procedures. The proposed rule would also require policies and procedures providing for such testing and review to occur at least

annually and following material changes thereto.²⁹⁰ The Commission preliminarily expects that covered clearing agencies would make efforts to secure the participation of all stakeholders in such testing and review of default procedures but recognizes that covered clearing agencies may have limited ability to require said participation by all such stakeholders, and therefore the proposed rule requires such participation by other stakeholders only when practicable.

The Commission preliminarily believes that including members and other stakeholders in such testing will help to ensure that procedures will be practical and effective in the face of an actual default. In addition to the relevant employees, members, and other stakeholders that would be involved in testing default procedures, a covered clearing agency may determine, as appropriate, to include members of its board of directors or similar governing body, and to invite linked clearing agencies, significant indirect participants, providers of credit facilities, and other service providers to participate. The Commission preliminarily believes requiring member and, where practicable, stakeholder participation in periodic testing is appropriate because successful default management will require coordination among these parties, particularly during periods of market stress.

d. Request for Comments

The Commission generally requests comments on all aspects of proposed Rule 17Ad–22(e)(13). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to ensure the covered clearing agency has the authority and operational capacity to take timely action to contain losses and liquidity demands and continue to meet its obligations? Should the proposed rule include minimum requirements, as proposed? Why or why not?

- Should the Commission require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require its members and, when practicable, other stakeholders to participate in the testing and review of its default procedures? Why or why not? Is it appropriate for stakeholders other than a covered

²⁸⁸ See proposed Rule 17Ad–22(e)(13), *infra* Part 0.

²⁸⁹ See proposed Rule 17Ad–22(e)(13), *infra* Part 0.

²⁹⁰ See proposed Rule 17Ad–22(e)(13), *infra* Part 0. The Commission preliminarily believes that an annual testing cycle is appropriate for the reasons described in Part 0.

clearing agency's participants to participate in the testing and review of its default procedures? Why or why not? Should the Commission require policies and procedures that would require stakeholders to be included in testing unless a determination is made by the covered clearing agency that it would be impracticable to do so?

- Should the Commission require policies and procedures regarding specific default procedures for covered clearing agencies, or should they have discretion to create their own default procedures consistent with the proposed rule? If the latter, how much flexibility should a covered clearing agency have in its policies and procedures regarding the time it takes to manage a default and liquidate positions?

11. Proposed Rule 17Ad-22(e)(14): Segregation and Portability

Proposed Rule 17Ad-22(e)(14) would apply to a covered clearing agency that is either a security-based swap clearing agency or a complex risk profile clearing agency.²⁹¹ The proposed rule would require such a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to enable the segregation and portability of positions of a member's customers and the collateral provided to the covered clearing agency with respect to those positions, and effectively protect such positions and related collateral from the default or insolvency of that member.²⁹² The Commission notes that security-based swap clearing agencies are currently not subject to rules regarding segregation and portability under existing Rule 17Ad-22.

The Commission preliminarily believes that proposed Rule 17Ad-22(e)(14) is appropriate because it facilitates the protection of customer collateral and positions by requiring a covered clearing agency's policies and procedures to prescribe means for holding or accounting for them separately from the assets of the clearing agency member providing services to the customer.

The Commission preliminarily believes that proposed Rule 17Ad-22(e)(14) should apply only to security-based swap clearing agencies and complex risk profile clearing agencies because existing rules applicable to broker-dealers address customer security positions and funds in cash securities and listed option markets,

thereby promoting segregation and portability and protecting customer positions and funds.²⁹³ The Commission considered certain international standards, which

²⁹³ Exchange Act Rule 15c3-3 requires broker-dealers that maintain custody of customer securities and cash (a "carrying broker-dealer") to take two primary steps to safeguard these assets. The steps are designed to protect customers by segregating their securities and cash from the broker-dealer's proprietary business activities. If the broker-dealer fails financially, the securities and cash should be readily available to be returned to customers. In addition, if the failed broker-dealer is liquidated in a formal proceeding under the Securities Investor Protection Act of 1970, the securities and cash would be isolated and readily identifiable as "customer property" and, consequently, available to be distributed to customers ahead of other creditors.

The first step required by Rule 15c3-3 is that a carrying broker must maintain physical possession or control of all fully paid and excess margin securities of their customers. See 17 CFR 240.15c3-3. Physical possession or control means the broker-dealer must hold these securities in one of several locations specified in Rule 15c3-3 and free of liens or any other interest that could be exercised by a third party to secure an obligation of the broker-dealer. Permissible locations include a bank, as defined in section 3(a)(6) of the Exchange Act, and a clearing agency. As described herein, holding jumbo/global positions in the record name and custody of a clearing agency is a fundamental part of current U.S. market structure in which many holders hold indirectly through "street name."

The second step is that a carrying broker-dealer must maintain a reserve of cash or qualified securities in an account at a bank that is at least equal in value to the net cash owed to customers, including cash obtained from the use of customer securities. The account must be titled "Special Reserve Bank Account for the Exclusive Benefit of Customers." The amount of net cash owed to customers is computed pursuant to a formula set forth in Exhibit A to Rule 15c3-3. Under the customer reserve formula, the broker-dealer adds up customer credit items (e.g. cash in customer securities accounts and cash obtained through the use of customer margin securities) and then subtracts from that amount customer debit items (e.g. margin loans). If credit items exceed debit items, the net amount must be on deposit in the customer reserve account in the form of cash and/or qualified securities. A broker-dealer cannot make a withdrawal from the customer reserve account until the next computation and then even only if the computation shows that the reserve requirement has decreased. The broker-dealer must make a deposit into the customer reserve account if the computation shows an increase in the reserve requirement. See 17 CFR 240.15c3-3.

In addition, records of customer positions are subject to broker-dealer recordkeeping rules. Exchange Act Rules 17a-3 and 17a-4 require records be kept for certain periods of time, such as three or six year periods depending upon the type of record. See 17 CFR 240.17a-3, 17a-4.

See also 15 U.S.C. 78c-5 (providing for segregation with respect to security-based swaps pursuant to Section 3E of the Exchange Act); Exchange Act Release No. 34-68071 (Oct. 18, 2012), 77 FR 70213, (Nov. 23, 2012) (proposing Rule 18a-4 under the Exchange Act for segregation with respect to security-based swaps). The Commission has also granted conditional relief under Sections 3E(b), (d), and (e) of the Exchange Act to, among others, clearing entities dually registered with the Commission and the CFTC as registered clearing agencies and DCOs, respectively. See Exchange Act Release No. 34-68433 (Dec. 14, 2012), 77 FR 75211 (Dec. 19, 2012).

recognize that cash market CCPs operate in legal regimes that achieve protection of customer assets by alternate means, in proposing Rule 17Ad-22(e)(14).²⁹⁴ The Commission further notes that customer security positions and funds in cash securities and listed options markets are further protected under the Securities Investor Protection Act of 1970 ("SIPA").²⁹⁵

In addition, in so limiting the scope of proposed Rule 17Ad-22(e)(14), the Commission intends to avoid requiring changes to the existing structure of cash securities and listed options markets in the United States where registered clearing agencies that provide CSD or CCP services play a central role. Transactions in the U.S. cash security and listed options markets are characterized by the following features: (i) Customers of members generally do not have an account at a clearing agency;²⁹⁶ and (ii) the clearing agency is not able to identify which participants' customers beneficially own

²⁹⁴ International standards recognize that regimes providing the same degree of protection as segregation and portability of customer positions at a CCP include the following features, in the event of a participant failure: (a) the customer positions can be identified timely, (b) customers will be protected by an investor protection scheme designed to move customer accounts from the failed participant to another participant in a timely manner, and (c) customer assets can be restored. See PFMI Report, *supra* note 1, at 83 (discussing Principle 14, Explanatory Note 3.14.6). The Commission preliminarily believes that the customer protections existing under the Commission's regulatory regime for broker-dealers include each of these three features and that limiting the application of proposed Rule 17Ad-22(e)(14) in the manner described above is appropriate.

The Commission also notes that, separately, it has proposed Rule 18a-4 to apply customer protection rules to security-based swap dealers and major security-based swap participants. The approach in proposed Rule 18a-4 was modeled on the customer protection scheme under Rule 15c3-3 for broker-dealers. See Exchange Act Release No. 34-68071 (Oct. 18, 2012), 77 FR 70213 (Nov. 23, 2012).

²⁹⁵ See 15 U.S.C. 78eee *et seq.* Pursuant to SIPA, when a broker-dealer that is a member of the Securities Investor Protection Corporation ("SIPC") fails and customer assets are missing, SIPC seeks to return customer cash and securities, and supplements the distribution of the remaining customer assets at the broker-dealer with SIPC reserve funds of up to \$500,000 per customer, including a maximum of \$250,000 for cash claims.

²⁹⁶ A customer of a member also would not have an account at the clearing agency where holding in record name (rather than through street name ownership). This is the case even where such record name owner-customer does not receive a paper security certificate but holds in book-entry form through the direct registration system, as direct registration system accounts are maintained by a transfer agent and not by the clearing agency. See Exchange Act Release No. 34-63320 (Nov. 16, 2010), 75 FR 71473, 71474 (Nov. 23, 2010), (discussing the ability of registered owners to hold their assets on the records of transfer agents in book-entry form through the direct registration system).

²⁹¹ See proposed Rule 17Ad-22(e)(14), *infra* Part 0.

²⁹² See *id.*

the street name positions registered in the record name of the clearing agency (or its nominee) and the clearing agency has no recourse to funds of customers of members. Therefore, in part because neither portability nor segregation could occur as a practical matter under the current cash securities and listed options markets structure, the Commission preliminarily believes that Proposed Rule 17Ad-22(e)(14) should apply only to a covered clearing agency that is either a security-based swap clearing agency or a complex risk profile clearing agency.

The Commission notes that segregation can be achieved either through an omnibus account structure, as is common in the U.S. securities markets today, or an individual account structure. An omnibus account structure, where all collateral belonging to all customers of a particular member is commingled and held in a single account segregated from that of the member, might not be as operationally intensive as an individual account structure. Omnibus accounts may expose a customer to “fellow-customer risk” (*i.e.* the risk that another customer of the same member will default) in the event of a loss that exceeds the amount of available collateral posted by the fellow customer who has defaulted and the available resources of the member, in which case the remaining commingled collateral of the member’s non-defaulting customers may be exposed to the loss. Fellow-customer risk is of particular concern because customers may have limited ability to monitor or to manage the risk of their fellow customers. To mitigate this risk, omnibus account structures can be designed in a manner that operationally commingles collateral related to customer positions while protecting customers legally on an individual basis.²⁹⁷ This may require a covered clearing agency to rely on the records of its members or maintain its own books reflecting customer-level interest in the customer’s portion of collateral.

An omnibus account structure may be more efficient when porting positions and collateral for a group of customers subject to a defaulting member (where there has been no customer default or where customer collateral is legally protected on an individual basis). Omnibus accounts may also foster portability depending on whether the

covered clearing agency collects margin on a gross or net basis. Margin calculated on a gross basis to support individual customer portfolios may result in less efficient netting with respect to members; however, it may eliminate the possibility of under-margined customer positions when ported. As a result, a clearing agency may be able to port in bulk or piecemeal the positions of a customer of a member that has defaulted. When margin is collected on a net basis, there may be a risk that full portability cannot be achieved if under-margining means that porting will depend on the ability and willingness of customers to provide additional collateral where transferee members are unwilling to accept the porting to them of under-margined positions.

Alternatively, an individual account structure may also provide a high degree of protection from the default of another customer of a member, as a customer’s collateral is intended to be used to cover losses associated solely with the default of that customer. In the event of a member failure (whether or not due to a customer default), clear and reliable identification of a customer’s collateral may promote portability of an individual customer’s positions and collateral or, alternatively, expedite their return to the customer. Maintaining individual accounts, however, can be operationally and resource intensive for a covered clearing agency and could impact the overall efficiency of its clearing operations. An individual account structure may also impact margin collection practices at a covered clearing agency, as the individual account structure may be inconsistent with net collection of margin because it may be impractical for the covered clearing agency to allocate the net margin to individual customers rather than among omnibus accounts.

The Commission preliminarily notes that a covered clearing agency subject to the proposed rule would be required to structure its portability arrangements in a way that makes it highly likely that the positions and collateral of a defaulting member’s customers will be effectively transferred to one or more other members. The Commission also preliminarily notes that the following methods may assist a covered clearing agency in achieving portability: (i) Identifying positions that belong to customers; (ii) identifying and asserting rights to related collateral held by or through the covered clearing agency; (iii) identifying potential members to accept the positions and collateral; (iv) disclosing relevant information to such members so that they can evaluate the

counterparty credit and market risk associated with the customers and positions, respectively; (v) transferring positions and related collateral to one or more members; and (vi) carrying out default management procedures in an orderly manner.

Finally, where a covered clearing agency’s policies and procedures facilitating portability permit a transfer of specific positions and collateral that is not performed with the consent of the member to whom they are transferred, the Commission preliminarily believes that a covered clearing agency could satisfy this requirement by having policies and procedures that set out the circumstances where this may occur. In addition, the Commission preliminarily notes that the portability requirement does not apply only upon default of a member; a covered clearing agency should have policies and procedures that facilitate porting in the normal course of business, such as when a customer ends its relationship with a member to start a new relationship with a different member, or as a result of other events, such as a merger involving the member.²⁹⁸

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(14). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency’s policies and procedures to enable the segregation and portability of positions of a participant’s customers and the collateral provided to the covered clearing agency with respect to those positions? Why or why not?
- Should the Commission require a covered clearing agency’s policies and procedures to effectively protect the positions of a participant’s customers and related collateral from the default or insolvency of that participant? Why or why not?
- Does the proposed rule affect certain identifiable categories of covered clearing agencies differently than others in ways not discussed in this proposing release? If so, how? Should the requirements under the proposed rule apply to certain identifiable categories of covered clearing agencies in addition to security-based swap and complex risk profile clearing agencies, as proposed? Please explain.

²⁹⁷ See, e.g., Protection of Cleared Swaps Customer Contracts and Collateral; Conforming Amendments to the Commodity Broker Bankruptcy Provisions, 77 FR 6336 (Feb. 7, 2012) (CFTC adopting rules imposing on DCOs legal segregation with operational commingling (“LSOC”) for cleared swaps).

²⁹⁸ In this regard, the Commission notes that policies and procedures regarding segregation and portability must satisfy the requirement for legal certainty in proposed Rule 17Ad-22(e)(1). See *supra* Part 0.

12. Proposed Rule 17Ad-22(e)(15): General Business Risk

Proposed Rule 17Ad-22(e)(15) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that the covered clearing agency can continue operations and services as a going concern if those losses materialize.²⁹⁹ Registered clearing agencies are not subject to rules regarding general business risk under existing Rule 17Ad-22, but the Commission preliminarily believes the proposed rule is appropriate for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets.

Proposed Rule 17Ad-22(e)(15) is designed to help mitigate the potential impairment of a covered clearing agency's status as a going concern resulting from general business losses, such as a decline in revenues or an increase in expenses resulting in expenses that exceed revenues and a loss that must be charged against the covered clearing agency's capital.³⁰⁰ The Commission preliminarily believes that proposed Rule 17Ad-22(e)(15) is appropriate because it would help to mitigate the risk of a disruption in clearance and settlement services that might result from general business losses. The Commission preliminarily believes that such impairment could be caused by a variety of business factors, including poor execution of business strategy, negative cash flows, or unexpected and/or excessively large operating expenses. The Commission preliminarily believes that general business losses should be considered separately in the covered clearing agency's risk management policies and procedures to promote effective and efficient measuring, monitoring, and management of general business risk. The risk of general business losses may require a firm to take into account past

loss events and financial projections, events distinct from the risks that arise from member default, credit losses, or liquidity shortfalls.³⁰¹ Proposed Rule 17Ad-22(e)(15) would require a covered clearing agency to establish implement, maintain and enforce written policies and procedures reasonably designed to address the management of general business risk and the development of a business risk profile to address these concerns.³⁰²

In addition, the Commission is proposing the requirements described below. Registered clearing agencies are not subject to similar rules under Rule 17Ad-22, but the Commission preliminarily believes the proposed requirements are appropriate for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets and are consistent with the Exchange Act requirements discussed above.³⁰³

a. Determining Liquid Net Assets for Recovery and an Orderly Wind-Down

Proposed Rule 17Ad-22(e)(15)(i) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to determine the amount of liquid net assets funded by equity based upon its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken.³⁰⁴ The Commission preliminarily believes that plans for orderly recovery and wind-down are critical to maintain functioning U.S. securities markets, particularly in times of market stress. Because of the reliance of securities markets, market participants, and investors on the safe, sound, and efficient operations of covered clearing agencies, the Commission believes that a disorderly failure of a covered clearing agency would have systemic consequences. Accordingly, the Commission is proposing to require liquid net assets funded by equity to ensure that the covered clearing agency can continue operations and services as a going concern in the event of general business losses. Equity allows a covered clearing agency to absorb losses on an ongoing

basis and should therefore be permanently available for this purpose. The specific amount of liquid net assets funded by equity that a covered clearing agency should hold is discussed in more detail below.

b. Requirements for Liquid Net Assets

Proposed Rule 17Ad-22(e)(15)(ii) would require a clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for holding liquid net assets funded by equity equal to the greater of either six months of its current operating expenses or the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services of the covered clearing agency, as contemplated by the plans established under proposed Rule 17Ad-22(e)(3)(ii).³⁰⁵ A clearing agency's policies and procedures would require these liquid net assets to be held in addition to resources held to cover participant defaults or other risks covered under the credit risk standard in proposed Rules 17Ad-22(e)(4)(i) through (iii) and the liquidity risk standard in proposed Rules 17Ad-22(e)(7)(i) and (ii).³⁰⁶

The Commission preliminarily believes that the requirements for a covered clearing agency's policies and procedures regarding liquid net assets are necessary to ensure that a covered clearing agency's general business risk management is sufficiently robust to facilitate either its orderly recovery or wind-down. The Commission is proposing these requirements to ensure that a covered clearing agency's policies and procedures clearly define what liquid net assets are sufficient under Rule 17Ad-22(e)(15) and to require a covered clearing agency to maintain, pursuant to its policies and procedures, liquid net assets appropriate to cover general business risk in addition to those resources appropriate for managing participant default, credit losses, or liquidity shortfalls. Based on its supervisory experience, the Commission preliminarily believes that a covered clearing agency could satisfy this requirement by having policies and procedures that limit appropriate liquid net assets to cash or cash equivalents because these types of assets would best

²⁹⁹ See proposed Rule 17Ad-22(e)(15), *infra* Part 0.

³⁰⁰ General business risk is the risk of potential losses arising from the covered clearing agency's administration and operation as a business enterprise. Such losses are not related to member default under proposed Rule 17Ad-22(e)(13) nor covered by the financial resources required for credit and liquidity risk management under proposed Rules 17Ad-22(e)(4) and (7). See *supra* Parts 0, 0, and 0 and *infra* Part 0 (proposing rules for managing credit risk, liquidity risk, and participant default, and providing proposed rule text, respectively).

³⁰¹ See *id.*

³⁰² See proposed Rule 17Ad-22(e)(15), *infra* Part 0.

³⁰³ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³⁰⁴ See proposed Rule 17Ad-22(e)(15)(i), *infra* Part 0.

³⁰⁵ See proposed Rule 17Ad-22(e)(15)(ii), *infra* Part 0; see also *supra* Part 0 (discussing recovery and wind-down plans under proposed Rule 17Ad-22(e)(3)(ii)).

³⁰⁶ See *supra* Parts 0 and 0 and *infra* Part 0 (discussing requirements under proposed Rules 17Ad-22(e)(4) and (e)(7), respectively, and providing proposed rule text).

facilitate continued operations if a clearing agency experienced general business losses.³⁰⁷ Further, the Commission preliminarily believes that a covered clearing agency could satisfy this requirement by having policies and procedures that fund liquid net assets by common stock, disclosed reserves, or other retained earnings in order to ensure that a covered clearing agency has a permanent source of capital from which to draw in order to continue as a going concern in the case of general business losses for at least a six month period or in accord with a determination of the board of directors of the covered clearing agency.³⁰⁸ Assets funded by debt or other less permanent sources of capital would not achieve this result and in some circumstances could further complicate the resolution process of a covered clearing agency.

The Commission also preliminarily believes that a backward-looking calculation of operating expenses based on the income statement for the most recently ended fiscal year would not be the type of policy and procedure sufficient to comply with the proposed requirements regarding current operating expense.³⁰⁹ While reviewing past losses and past levels of operating expense may be a useful reference point, the Commission envisions that one possible approach a covered clearing

agency could take in fulfillment of the proposed requirement would be to consider projected operating expense expected over some time period, as well as potential changes to the business environment of the covered clearing agency over that time period. Based on its supervisory experience, the Commission also believes that the following factors may materially affect current operating expenses, as compared to operating expense experienced in the past, that a covered clearing agency may need to take into account and therefore are likely to be important to the covered clearing agency's forward-looking projections: (i) Expectations regarding expansion of its business including as a result of offering new services or clearing and settling new types of securities, (ii) expectations regarding contraction of its business including due to reduction in or loss of certain types of clearing and settlement activity or clearing members, (iii) potential risk of any large one-time or non-recurring types of losses, and (iv) the degree to which expected future losses may be covered by insurance or an indemnity provided by a third-party unaffiliated with the covered clearing agency.

The proposed rule also requires a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for monitoring its business operations and reducing the likelihood of losses, which the Commission believes furthers the requirements of the Exchange Act discussed above.³¹⁰

Because of the integral role that liquid net assets play in supporting the recovery or orderly wind-down of a covered clearing agency in the event of a business loss, the Commission is proposing requirements for a clearing agency's policies and procedures to require liquid net assets, funded by equity, equal to the greater of six months of operating expenses or an amount determined by the board of directors to be sufficient to facilitate an orderly recovery or wind-down of critical operations and services. The Commission preliminarily believes this is appropriate because liquid net assets allow the covered clearing agency to continue operations as a going concern by acting as a cushion while the covered clearing agency is in recovery or wind-down.

c. Plan for Raising Additional Equity

Proposed Rule 17Ad-22(e)(15)(iii) would further require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for maintaining a viable plan, approved by the board of directors and updated at least annually, for raising additional equity should its equity fall close to or below the amount required by the proposed rule as discussed above.³¹¹

As noted above, because of the reliance of securities markets, market participants, and investors on the safe, sound, and efficient operations of covered clearing agencies, a disorderly failure of a covered clearing agency would have systemic consequences. The proposed rule requires a covered clearing agency to maintain a viable plan to raise additional equity in the event that its liquid net assets funded by equity fall close to or below the amount required by the proposed rule.³¹² The Commission preliminarily believes that the proposed rule is necessary to facilitate ongoing management of a covered clearing agency's general business risk and to provide a covered clearing agency with a mechanism for maintaining or replenishing appropriate levels of equity following business losses.

d. Request for Comments

The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(15). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to identify, monitor, and manage the covered clearing agency's general business risk? Why or why not? Are there other requirements that the Commission should include in proposed Rule 17Ad-22(e)(15) to address the general business risk management at covered clearing agencies?

- Is the proposed requirement for a covered clearing agency's policies and procedures to hold liquid net assets funded by equity equal to the greater of either (x) six months of the covered clearing agency's current operating expenses or (y) the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services of the covered clearing agency

³⁰⁷ Regarding marketable securities that may be included as cash equivalents within liquid net assets, the Commission has not proposed to require such assets to be readily available and convertible into cash through certain funding arrangements as it has proposed under Rule 17Ad-22(e)(7)(ii) (which incorporates proposed Rule 17Ad-22(a)(15) defining "qualifying liquid resources"). The Commission preliminarily believes the amount of liquidity needed to cover participant defaults in the context of proposed Rule 17Ad-22(e)(7) may be significantly greater than the amount of liquidity needed to cover general business losses, and it is therefore appropriate to permit the use of such assets in the context of proposed Rule 17Ad-22(e)(7)(ii), in order to provide greater flexibility to covered clearing agencies regarding liquidity risk management.

³⁰⁸ The Commission preliminarily believes it is appropriate to apply the limitation that liquid net assets be funded by equity in proposed Rule 17Ad-22(e)(15) but has not proposed such limitation in Rule 17Ad-22(e)(4) (regarding financial resources required to manage credit risk) or Rule 17Ad-22(e)(7)(ii) (regarding qualifying liquid resources in relevant currencies required to manage liquidity risk) because equity allows a covered clearing agency to absorb losses on an ongoing basis so that it can continue operations as a going concern. Cf. PFMI Report, *supra* note 1, at 90 & n.137.

In addition, the Commission preliminarily believes a covered clearing agency may exclude depreciation and amortization expenses from its calculation of current operating expenses because depreciation and amortization expenses are non-cash expenses and accordingly would not have an effect on a covered clearing agency's cash flow, which might affect its ability to continue operations as a going concern.

³⁰⁹ See *id.* at 90.

³¹⁰ See notes 54-56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³¹¹ See proposed Rule 17Ad-22(e)(15)(ii), *infra* Part 0.

³¹² See proposed Rule 17Ad-22(e)(15)(iii), *infra* Part 0.

appropriate? Why or why not? Under the proposed requirement for policies and procedures, is six months of operating expenses appropriate? Should the Commission adopt a different standard, such as three, nine, or twelve months? Please explain in detail why using an alternative standard would be appropriate.

- Should the Commission require a covered clearing agency's policies and procedures to hold liquid net assets in addition to resources held to cover participant defaults or other risks covered under the credit risk standard in Rule 17Ad-22(b)(3)? Under the credit risk standard in proposed Rules 17Ad-22(e)(4)(i) through (iii), as applicable? Under the liquidity risk standard in proposed Rules 17Ad-22(e)(7)(i) and (ii), as applicable? Why or why not? Has the Commission provided sufficient guidance regarding what constitutes "liquid net assets"? Why or why not?

- Should a covered clearing agency be required to provide notice to the Commission at any time before its liquid net assets reach the minimum required amount? If so, at what amount should the requirement apply, *e.g.* at 110% of the minimum, 120% of the minimum, or some other amount?³¹³

- Regarding securities that are cash equivalents and therefore liquid net assets, should the Commission establish requirements for policies and procedures that discount the value of these securities compared to their fair value?

13. Proposed Rule 17Ad-22(e)(16): Custody and Investment Risks

Proposed Rule 17Ad-22(e)(16) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to safeguard its own and its participants' assets and minimize the risk of loss and delay in access to these assets.³¹⁴ It also requires a clearing agency to invest its own and its participants' assets in instruments with minimal credit, market, and liquidity risks.³¹⁵ Rule 17Ad-22(d)(3) currently requires similar policies and procedures of registered clearing agencies, but the proposed rule would

further require a covered clearing agency to have policies and procedures designed to safeguard its own and its participants' assets.³¹⁶ The Commission preliminarily believes this additional specificity is appropriate for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets. Because this is the only element of Rule 17Ad-22(e)(16) that differs from Rule 17Ad-22(d)(3), the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures to comply with the proposed rule.³¹⁷

Custody risk is the risk of loss on assets held in custody in the event of a custodian's (or subcustodian's) insolvency, negligence, fraud, or poor administration. Investment risk is the risk of loss faced by a clearing agency when it invests its own or its participants' assets. In each case, the risk is the likelihood that assets securing participant obligations to the covered clearing agency or otherwise needed for the clearing agency to meet its own obligations would be unavailable or insufficient when the covered clearing agency needs to draw on them. Failure by a clearing agency to hold assets in instruments with minimal credit, market, and liquidity risk may limit the clearing agency's ability to retrieve these assets promptly. That, in turn, can cause the clearing agency to fail to meet its settlement obligations to its participants or cause the clearing agency's participants to fail to meet their obligations. Accordingly, as under Rule 17Ad-22(d)(3), the Commission believes it is appropriate to continue to limit such risks to ensure the proper functioning of a covered clearing agency pursuant to Section 17A of the Exchange Act.³¹⁸ The Commission also preliminarily believes that requiring a covered clearing agency to have policies and procedures that safeguard its own

and its participants' assets further supports this objective.

Under existing Rule 17Ad-22(d)(3), the members of a registered clearing agency typically deposit securities with the clearing agency, or the clearing agency holds assets that secure the participants' obligations to it and may invest these assets. In such circumstances, the clearing agency is exposed to custody and investment risk. The Commission is aware that, currently, clearing agencies ordinarily seek to minimize the risk of loss or delay in access by holding assets that are highly liquid (*e.g.*, cash, U.S. Treasury securities, or securities issued by a U.S. government agency) and by using only supervised and regulated entities such as banks to act as custodians for the assets and to facilitate settlement. Steps are also ordinarily taken to ensure assets held in custody are protected against claims of a custodian's creditors through trust accounts or other equivalent arrangements. In addition, the use of individual custodians is subject to periodic assessment across several risk criteria and should remain within acceptable concentration limits.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(16). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to invest its own and its participants' assets in instruments with minimal credit, market, and liquidity risks? Why or why not?

- Should the Commission require a covered clearing agency's policies and procedures to minimize the risk of loss and delay in access to its own and its participants' assets? Why or why not?

- Has the Commission provided sufficient guidance regarding what instruments have "minimal credit, market, and liquidity risks"? Should the Commission further specify what kinds of assets would be appropriate under the proposed requirement, such as investments that are secured by, or are claims on, high-quality obligors and investments that allow for timely liquidation with little, if any, adverse price effect? Why or why not?

- Should covered clearing agencies ever be permitted to hold assets in instruments that do not have minimal credit, market, and liquidity risk? If so, why and under what circumstances? What type of measures should covered clearing agencies have in place to minimize the risk of loss from delays in accessing these assets? Should the

³¹³ See, *e.g.*, Commission Delegated Regulation No. 152/2013 of 19 December 2012, 2013 O.J. (L 52), at art. 1(3) (European Union requiring that, if the required amount of capital held by a CCP is lower than 110% of the capital requirements or lower than 110% of £7.5 million (the "notification threshold"), the CCP shall immediately notify the competent authority and keep it updated at least weekly, until the amount of capital held by the CCP returns above the notification threshold).

³¹⁴ See proposed Rule 17Ad-22(e)(16), *infra* Part 0.

³¹⁵ See *id.*

³¹⁶ Registered clearing agencies are currently subject to existing Rule 17Ad-22(d)(3), which requires them to establish, implement, maintain and enforce written policies and procedures reasonably designed to hold assets in a manner that minimizes risk of loss or of delay in its access to them, and invest assets in instruments with minimal credit, market, and liquidity risks. See 17 CFR 240.17Ad-22(d)(3); see also Clearing Agency Standards Release, *supra* note 5, at 66247-48.

³¹⁷ See *supra* Part 0.

³¹⁸ The Commission preliminarily believes, however, that it should not indirectly prohibit the use of commercial banks by covered clearing agencies holding cash as collateral or for other services related to clearance and settlement activity when comparable services are available from a central bank.

proposed rule specify any such requirements? Should the Commission develop more specific criteria regarding how covered clearing agencies may hold or invest assets?

14. Proposed Rule 17Ad-22(e)(17): Operational Risk Management

Proposed Rule 17Ad-22(e)(17) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to manage the covered clearing agency's operational risk.³¹⁹ Operational risk involves, among other things, the likelihood that deficiencies in information systems or internal controls, human errors or misconduct, management failures, unauthorized intrusions into corporate or production systems, or disruptions from external events such as natural disasters, would adversely affect the functioning of a clearing agency. Proposed Rule 17Ad-22(e)(17)(i) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls.³²⁰ Proposed Rule 17Ad-22(e)(17)(ii) would require the covered clearing agency to establish, implement, maintain, and enforce written policies and procedures reasonably designed to ensure that systems have a high degree of security, resiliency, operational reliability, and adequate, scalable capacity.³²¹ Proposed Rule 17Ad-22(e)(17)(iii) further requires a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a business continuity plan that addresses events posing a significant risk of disrupting operations.³²² Rule 17Ad-22(d)(4) currently requires a registered clearing agency to have policies and procedures that are substantially similar to those in proposed Rules 17Ad-22(e)(17)(i) through (iii).³²³ Although

proposed Rules 17Ad-22(e)(17)(i) through (iii) differ from Rule 17Ad-22(d)(4) in contemplating both internal and external operational risks, a high degree of security and operational reliability for systems, and, in the context of business continuity plans, events posing a significant risk of disrupting operations, the Commission preliminarily believes that a covered clearing agency may need to make only limited changes to update its policies and procedures. The Commission preliminarily believes these requirements are appropriate for covered clearing agencies given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets.

As with Rule 17Ad-22(d)(4), the Commission preliminarily believes that the requirements in proposed Rule 17Ad-22(e)(17)(i) through (iii) should help covered clearing agencies and its participants continue to address and manage risks posed by potential operational deficiencies. Specifically, to help limit disruptions that may impede the proper functioning of a covered clearing agency, the Commission preliminarily believes it is imperative that covered clearing agencies review their operations for potential weaknesses and develop appropriate systems, controls, and procedures to address weaknesses the proposed rule seeks to mitigate.

The Commission intends for proposed Rule 17Ad-22(e)(17) to supplement the existing guidance provided by the Commission in its Automation Review Policy ("ARP") statements³²⁴ and the

operational risk and minimize them through the development of appropriate systems, controls, and procedures. It also requires registered clearing agencies to establish policies and procedures reasonably designed to implement systems that are reliable and secure, and have adequate, scalable capacity; and have business continuity plans that allow for timely recovery of operations and fulfillment of a clearing agency's obligations. See 17 CFR 240.17Ad-22(d)(4); see also Clearing Agency Standards Release, *supra* note 5, at 66248-49.

³²⁴ See Automated Systems of Self-Regulatory Organizations, Exchange Act Release No. 34-27445 (Nov. 16, 1989), 54 FR 48703 (Nov. 24, 1989) ("ARP I"); Automated Systems of Self-Regulatory Organizations (II), Exchange Act Release No. 34-29815 (May 9, 1991), 56 FR 22489 (May 15, 1991) ("ARP II").

Generally, the guidance in ARP I and ARP II provides for the following activities by clearing agencies: (1) Performing periodic risk assessments of its automated data processing ("ADP") systems and facilities; (2) providing for the selection of the clearing agency's independent auditors by non-management directors and authorizing such non-management directors to review the nature, scope, and results of all audit work performed; (3) having an adequately staffed and competent internal audit department; (4) furnishing annually to participants audited financial statements and an opinion from an independent public accountant as to the clearing agency's system of internal control—including

Interagency White Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System.³²⁵ The Commission also preliminarily believes that the proposed rules are consistent with the Commission's objectives in proposed Regulation SCI.³²⁶

Request for Comments. The Commission generally requests comments on all aspects of proposed Rules 17Ad-22(e)(17). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to manage its operational risks by establishing and maintaining a business continuity plan that addresses events posing a significant risk of disrupting operations? Why or why not? Has the Commission provided sufficient guidance on what an event "posing a significant risk of disrupting operations" would be?

- Should the Commission's proposal require a specific methodology to identify and mitigate operational risk? If so, what is the methodology and why should this methodology be imposed?

- Is the Commission's proposed approach with respect to ensuring that systems have a high degree of security, resiliency, and operational reliability appropriate and sufficiently clear? Why or why not?

- Are there any other requirements that should be included in the rule to facilitate policies and procedures for operational risk management? Why or why not?

- Should the Commission adopt additional policies and procedures requirements for business continuity planning? If so, please explain in detail.

15. Proposed Rule 17Ad-22(e)(18): Access and Participation Requirements

Proposed Rule 17Ad-22(e)(18) would require a covered clearing agency to establish, implement, maintain and

unaudited quarterly financial statements also should be provided to participants upon request; and (5) developing and maintaining plans to assure the safeguarding of securities and funds, the integrity of the ADP system, and recovery of securities, funds, or data under a variety of loss or destruction scenarios.

³²⁵ See Exchange Act Release No. 34-47638 (Apr. 7, 2003), 68 FR 17809 (Apr. 11, 2003), available at <http://www.sec.gov/news/studies/34-47638.htm>.

³²⁶ Proposed Rule 17Ad-22(e)(17) would not conflict with the Commission's proposed Regulation SCI, should the Commission determine at a later date to adopt those rules as proposed. Proposed Regulation SCI would, however, subject all covered clearing agencies to certain requirements, including requirements for operational risk management and business continuity planning, in addition to those that appear in this proposal. See Exchange Act Release No. 34-69077 (Mar. 8, 2013), 78 FR 18083, 18091-141 (Mar. 25, 2013).

³¹⁹ See proposed Rule 17Ad-22(e)(17), *infra* Part 0.

³²⁰ See proposed Rule 17Ad-22(e)(17)(i), *infra* Part 0.

³²¹ See proposed Rule 17Ad-22(e)(17)(ii), *infra* Part 0. By requiring "adequate, scalable capacity," the Commission preliminarily believes that a covered clearing agency should have operational systems that can be extended or expanded based on its anticipated business needs.

³²² See proposed Rule 17Ad-22(e)(17)(iii), *infra* Part 0.

³²³ Rule 17Ad-22(d)(4) requires a registered clearing agency to establish policies and procedures reasonably designed to identify sources of

enforce written policies and procedures reasonably designed to establish objective, risk-based, and publicly disclosed criteria for participation,³²⁷ which permit fair and open access by direct and, where relevant, indirect participants and other FMUs.³²⁸

In addition to the requirements described above,³²⁹ Section 17A of the Exchange Act requires registered clearing agencies to have rules not designed to permit unfair discrimination in the admission of participants.³³⁰ The Commission has historically used its authority to help ensure fair access and participation requirements.³³¹ In this regard, the Commission notes that Rules 17Ad-22(b)(5) through (7) impose requirements regarding access and participation for the policies and procedures of registered clearing agencies that provide CCP services.³³² Similarly, Rule 17Ad-22(d)(2) requires a registered clearing agency to establish policies and procedures for access and participation that require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP and have procedures in place to monitor that participation requirements are met on an ongoing basis.³³³

³²⁷ The Commission notes that, in contrast to other requirements in Rule 17Ad-22(e) where “transparent” is used and permits disclosure “where appropriate” pursuant to Rule 17Ad-22(a)(20), the requirement here for policies and procedures designed to ensure “publicly disclosed” criteria for participation would require policies and procedures requiring such disclosure.

³²⁸ See proposed Rule 17Ad-22(e)(18), *infra* Part 0.

³²⁹ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³³⁰ See 15 U.S.C. 78q–1(b)(3)(F).

³³¹ See, e.g., 17 CFR 240.17Ad-22(b)(5) through (7), (d)(2); Clearing Agency Standards Release, *supra* note 5, at 66238–43, 66246–47 (adopting minimum access and participation requirements for registered clearing agencies); Exchange Act Release No. 34–16900 (June 17, 1980), 45 FR 41920 (June 23, 1980) (outlining staff guidance establishing minimum standards for participation and fair access necessary for registration as a clearing agency).

³³² See 17 CFR 240.17Ad-22(b)(5) through (7); Clearing Agency Standards Release, *supra* note 5, at 66238–43. The Commission notes that covered clearing agencies providing CCP services would remain subject to the requirements under Rule 17Ad-22(b), in addition to the requirements under proposed Rule 17Ad-22(e)(18).

³³³ Rule 17Ad-22(d)(2) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to (i) require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency; (ii) have procedures in place to monitor that participation requirements are met on an ongoing basis; (iii) have

Appropriate minimum operational, legal, and capital requirements for membership that are maintained and enforced through the supervisory practices of a clearing agency help to ensure all members will be reasonably capable of meeting their various obligations to the clearing agency in stressed market conditions and upon member default. Member defaults challenge the safe functioning of a clearing agency by creating credit and liquidity risks, which impede a clearing agency’s ability to settle securities transactions in a timely manner. Ensuring that clearing members meet objective levels of operational and financial soundness helps to counterbalance the potential for cascading effects on other participants and limit the potential of a systemic disruption in the U.S. securities markets. Fair and open access to all parties meeting the objective criteria for participation similarly helps to ensure wide participation and thereby increase beneficial risk mitigating effects.

Accordingly, the Commission preliminarily believes Rule 17Ad-22(e)(18) is appropriate because it would promote membership standards at covered clearing agencies that are likely to limit the potential for member defaults and, as a result, losses to non-defaulting members in the event of a member default. The proposed rule has similar requirements to those applied to registered clearing agencies under Rule 17Ad-22(d)(2) but would also explicitly require a covered clearing agency’s policies and procedures to establish publicly disclosed criteria for participation, which permit fair and open access by direct and, where relevant, indirect participants and other FMUs, and also require that the criteria be risk-based, in addition to objective.³³⁴ The Commission

participation requirements that are objective and publicly disclosed, and permit fair and open access. See 17 CFR 240.17Ad-22(d)(2); see also Clearing Agency Standards Release, *supra* note 5, at 66246–47.

The Commission notes that the elements of Rule 17Ad-22(d)(2)(i), regarding policies and procedures requiring participants to have financial resources and robust operational capacity to meet obligations arising from participation are also reflected in other proposed rules, including Rules 17Ad-22(e)(4) and (17). See *supra* Parts 0 (requiring under proposed Rule 17Ad-22(e)(4) policies and procedures for testing the sufficiency of financial resources) and 0 (requiring under proposed Rule 17Ad-22(e)(17) policies and procedures for operational risk management).

³³⁴ The Commission is proposing Rule 17Ad-22(e)(18) as part of a comprehensive set of rules for regulating covered clearing agencies that is consistent with and comparable to other domestic and international standards for FMIs. Because of the similarity between the existing requirement in Rule 17Ad-22(d)(2)(iii) and these requirements under

preliminarily believes the requirement that policies and procedures for publicly disclosed criteria for participation that specify fair and open access by both direct and indirect participants and other FMUs is appropriate because of the size and reach of covered clearing agencies, which are likely to transact or link with many participants, both direct and indirect, as well as other FMUs. The Commission also preliminarily believes that the requirement for risk-based criteria helps protect investors and facilitates prompt and accurate clearance and settlement by helping to ensure that covered clearing agencies accept participants that are less prone to default.

In addition, the Commission is proposing a requirement that covered clearing agencies establish, implement, maintain and enforce written policies and procedures reasonably designed to require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency and to monitor compliance with participation requirements on an ongoing basis. Rule 17Ad-22(d)(2)(i) and (ii) also require a registered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to have procedures in place to require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency and to monitor that participation requirements are met on an ongoing basis.³³⁵ Because these other requirements in proposed Rule 17Ad-22(e)(18) are the same as those for registered clearing agencies more generally under existing Rule 17Ad-22(d)(2), the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures.³³⁶ As with Rule 17Ad-22(d)(2), the Commission believes these requirements are appropriate because they would further support membership standards at covered clearing agencies that are likely to limit the potential for member defaults and, as a result, losses

proposed Rule 17Ad-22(e)(18), the Commission anticipates that covered clearing agencies may need to make only limited changes to update their policies and procedures to comply with these requirements under the proposed rule. See *supra* Part 0.

³³⁵ See *supra* note 333 and accompanying text.

³³⁶ See *supra* Part 0 (noting the anticipated effect of the proposed rule) and *infra* Part 0 (describing the current practices at registered clearing agencies regarding settlement).

to non-defaulting members in the event of a member default.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(18). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to monitor compliance with its participation requirements on an ongoing basis? Why or why not? Would a more specific monitoring requirement be appropriate? For example, should this requirement specify a frequency of review? Why or why not? If so, what would be the appropriate frequency of review? Please explain.

- Would it be appropriate for the Commission to require a covered clearing agency's policies and procedures to provide for different categories of participation? If so, please explain in detail what these different categories would be and why they would be appropriate.

16. Proposed Rule 17Ad-22(e)(19): Tiered Participation Agreements

Proposed Rule 17Ad-22(e)(19) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage the material risks to the covered clearing agency arising from arrangements in which firms that are indirect participants in the covered clearing agency rely on the services provided by direct participants in the covered clearing agency to access the covered clearing agency's payment, clearing, or settlement facilities (hereinafter "tiered participation arrangements").³³⁷ The Commission preliminarily believes the proposed rule is appropriate due to the associated dependencies and risk exposures that tiered participation arrangements create, as discussed above. Such risks, including credit, liquidity, and operational risks, can undermine the operations of a covered clearing agency and pose risks to the operations of a clearing agency's participants, both direct and indirect, and to the broader securities markets as well.

Registered clearing agencies are currently not subject to rules regarding tiered participation arrangements under existing Rule 17Ad-22. The

Commission preliminarily believes the proposed rule is appropriate for covered clearing agencies, given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, and is consistent with the requirements of the Exchange Act discussed above.³³⁸

The Commission has previously noted that, in situations where direct access to clearing agencies is limited by reasonable participation standards, firms that do not meet these standards may still be able to access clearing agencies through correspondent clearing arrangements with direct participants.³³⁹ Such a process would involve the non-participant entering into a correspondent clearing arrangement with a participant so that the transaction may be submitted by the participant to the clearing agency. The dependencies and risk exposures, including credit, liquidity, and operational risks, inherent in tiered participation arrangements present risks to a clearing agency and its functioning, in addition to the direct participant. A covered clearing agency with direct participants that clear transactions on behalf of indirect participants with large values or volumes faces the risk of default by both the indirect participant itself and the direct participant through which those transactions are routed. Accordingly the Commission is proposing Rule 17Ad-22(e)(19) to promote the ongoing management of risks associated with such tiered participation arrangements.

In addition, the Commission is proposing to require that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to regularly review the material risks to the covered clearing agency arising from such tiered participation arrangements.³⁴⁰ The Commission preliminarily believes the proposed requirement is appropriate due to the ongoing dependencies and risk exposures that tiered arrangements present to the operation of a covered clearing agency and to the operation of a covered clearing agency's participants. Registered clearing agencies are

currently not subject to a similar requirement under existing Rule 17Ad-22, and that the proposed rule is appropriate for covered clearing agencies, given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets, and is consistent with the requirements of the Exchange Act discussed above.³⁴¹

The operational, financial, and other interconnections between direct and indirect participants to tiered participation arrangements are subject to market forces and can therefore change over time. Because direct and indirect participants collectively contribute to the operational and financial stability of a covered clearing agency, the Commission preliminarily believes that the requirement to regularly review a covered clearing agency's tiered participation arrangements supports the Exchange Act requirements that clearing agencies be able to facilitate prompt and accurate clearance and settlement, protect investors and the public interest, and ensure the safeguarding of securities and funds in the custody or control of the clearing agency or for which the clearing agency is responsible.³⁴²

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(19). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to identify, monitor and manage the material risks to the covered clearing agency arising from arrangements in which firms that are indirect participants in the covered clearing agency rely on the services provided by direct participants to access the covered clearing agency's payment, clearing, or settlement facilities? Why or why not?

- Has the Commission provided sufficient guidance regarding who would be "indirect participants" and "direct participants"? Why or why not?

17. Proposed Rule 17Ad-22(e)(20): Links

Proposed Rule 17Ad-22(e)(20) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage risks related to any link with one or more other clearing

³³⁸ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³³⁹ See Exchange Act Release No. 34–63107 (Oct. 14, 2010), 75 FR 65882 (Oct. 26, 2010) (proposing ownership limitations and governance requirements for security-based swap clearing agencies, security-based swap execution facilities, and national securities exchanges with respect to security-based swaps under Regulation MC).

³⁴⁰ See proposed Rule 17Ad-22(e)(19), *infra* Part 0.

³⁴¹ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³⁴² See 15 U.S.C. 78q-1(b)(3)(A).

³³⁷ See proposed Rule 17Ad-22(e)(19), *infra* Part 0. Because proposed Rule 17Ad-22(e)(19) only addresses the situation where a covered clearing agency relies on direct participants, the proposed rule does not apply to a broker-dealer that is a member of a CSD and maintains accounts for retail customers.

agencies, FMUs, or trading markets.³⁴³ Rule 17Ad-22(d)(7) requires registered clearing agencies to have policies and procedures for evaluating the potential sources of risks that can arise from links.³⁴⁴ For the purposes of Rule 17Ad-22(e)(20), however, the Commission would further define “link” in proposed Rule 17Ad-22(a)(10) to mean any set of contractual and operational arrangements between a covered clearing agency and one or more other clearing agencies, FMUs, or trading venues that connect them directly or indirectly for the purposes of participating in settlement, cross margining, expanding its services to additional instruments and participants, or for any other purposes material to their business.³⁴⁵ The Commission preliminarily believes this expanded and more prescriptive approach to defining a link is appropriate for covered clearing agencies given their size, global operation, and importance to the U.S. securities markets.

In addition to the requirements discussed above,³⁴⁶ Section 17A of the Exchange Act directs the Commission to facilitate the establishment of linked or coordinated facilities for clearance and settlement.³⁴⁷ Links between clearing agencies, FMUs, and trading markets develop in several circumstances for different reasons. A CCP may establish a link with another CCP to enable a participant in the first CCP to clear trades with a participant in the second CCP. Similarly, a CSD may establish a link with another CSD to enable its participants to access services provided by the other CSD. Clearing agencies may also generally establish links with trade repositories and trading markets to fulfill regulatory obligations.

Accordingly, the Commission is proposing Rule 17Ad-22(e)(20) to ensure that covered clearing agencies identify and assess the potential sources of risk arising from a link arrangement and incorporate that analysis into its risk management policies and procedures. In certain cases, the creation of a link may raise risks similar to those raised by tiered participation arrangements and participant requirements, discussed above: Namely, the interconnections between the clearing agency and the other entity may increase the risks to the clearing agency stemming from, among other things, the risks of participant default, credit losses, or liquidity shortfalls arising through the linked entity rather than the clearing agency’s own operations.³⁴⁸ The range of implicated risks is broad; a clearing agency that operates links may increase its exposure to legal, operational, custody, settlement, credit, and liquidity risk depending on the nature and extent of the link involved.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(20) and 17Ad-22(a)(10). In addition, the Commission requests comments on the following specific issue:

- Should the Commission require a covered clearing agency’s policies and procedures to identify, monitor, and manage risks related to any link the covered clearing agency establishes with one or more other clearing agencies, FMUs, or trading markets? Why or why not?

- Is the definition of “link” in proposed Rule 17Ad-22(a)(10) appropriate and sufficiently clear in light of the proposed requirements? Why or why not? Is there an alternative definition that the Commission should consider?

18. Proposed Rule 17Ad-22(e)(21): Efficiency and Effectiveness

Proposed Rule 17Ad-22(e)(21) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that it is efficient and effective in meeting the requirements of its participants and the markets it serves.³⁴⁹ Rule 17Ad-22(d)(6) similarly requires registered clearing agencies to have policies and procedures designed to be cost-effective

in meeting the requirements of participants while maintaining safe and secure operations.³⁵⁰

Proposed Rule 17Ad-22(e)(21) would further require a covered clearing agency’s management to regularly review the efficiency and effectiveness of its (i) clearing and settlement arrangements; (ii) operating structure, including risk management policies, procedures, and systems; (iii) scope of products cleared, settled, or recorded; and (iv) use of technology and communication procedures.³⁵¹ The Commission preliminarily believes this requirement for regular review is appropriate for covered clearing agencies given the risks that a covered clearing agency’s size, global operation, and importance pose to the U.S. securities markets.³⁵²

For purposes of the proposed rule, efficiency refers generally to the efficient use of resources by a clearing agency to perform its functions, and effectiveness refers to its ability to meet its intended goals and objectives. A covered clearing agency that operates inefficiently or functions ineffectively may distort financial activity and market structure, increasing not only the risks borne by its members, but also the risks of indirect participants, such as the customers of participants or other buyers and sellers of securities. If a covered clearing agency is inefficient, a participant may choose not to trade or may choose to settle bilaterally, which could potentially result in greater risks to the U.S. financial system than would otherwise occur in the presence of a more efficiently functioning covered clearing agency.

In addition to the requirements discussed above,³⁵³ Section 17A of the Exchange Act requires that registered clearing agencies have rules designed to promote the prompt and accurate clearance and settlement of securities transactions,³⁵⁴ following a finding by Congress that inefficient procedures for clearance and settlement impose

³⁴³ See proposed Rule 17Ad-22(e)(20), *infra* Part 0.

³⁴⁴ Rule 17Ad-22(d)(7) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to evaluate the potential sources of risks that can arise when the clearing agency establishes links either cross-border or domestically to clear or settle trades, and ensure that the risks are managed prudently on an ongoing basis. See 17 CFR 240.17Ad-22(d)(7); see also Clearing Agency Standards Release, *supra* note 5, at 66250–51.

³⁴⁵ See proposed Rule 17Ad-22(a)(10), *infra* Part 0.

³⁴⁶ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³⁴⁷ See 15 U.S.C. 78q–1(a)(2)(A)(ii); see also 15 U.S.C. 78q–1(a)(1)(D) (Congress finding that the linking of all clearance and settlement facilities and the development of uniform standards and procedures for clearance and settlement will reduce unnecessary costs and increase the protection of investors and persons facilitating transactions by and acting on behalf of investors).

³⁴⁸ See *supra* Parts 0 and 0 (discussing the access and participation requirements in proposed Rule 17Ad-22(e)(18) and requirements for tiered participation arrangements in proposed Rule 17Ad-22(e)(19)).

³⁴⁹ See proposed Rule 17Ad-22(e)(21), *infra* Part 0.

³⁵⁰ Rule 17Ad-22(d)(6) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to be cost-effective in meeting the requirements of participants while maintaining safe and secure operations. See 17 CFR 240.17Ad-22(d)(6); see also Clearing Agency Standards Release, *supra* note 5, at 66250.

³⁵¹ See proposed Rule 17Ad-22(e)(21), *infra* Part 0.

³⁵² See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³⁵³ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³⁵⁴ See 15 U.S.C. 78q–1(b)(3)(F).

unnecessary costs on investors and persons facilitating transactions by and acting on behalf of investors.³⁵⁵ The Commission preliminarily believes that proposed Rule 17Ad-22(e)(21) is appropriate because a covered clearing agency must be designed and operated to meet the needs of its participants and the markets it serves, while remaining sufficiently flexible to respond to changing demand and new technologies.

The Commission is also proposing to require that a covered clearing agency regularly review the items identified in Rule 17Ad-22(e)(21)(i) through (iv) because the Commission preliminarily believes that they are reflective of key aspects of a clearing agency's business necessary for efficient and effective operation. Moreover, because technology, sound practices, market forces, and the number and characteristics of participants may change over time, the Commission preliminarily believes that measures of efficiency and effectiveness must be subject to policies and procedures for regular review.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(21). In addition, the Commission requests comments on the following specific issues:

- Has the Commission provided sufficient guidance on what policies and procedures would be necessary to ensure that a covered clearing agency is "efficient and effective" in meeting the requirements of the proposed rule? Why or why not?
- Is the proposed requirement for a covered clearing agency's policies and procedures to regularly review the following aspects of its business and operations appropriate: Clearing and settlement arrangements; operating structure, including risk management policies, procedures, and systems; the scope of products cleared, settled, or recorded; and the use of technology and communication procedures? Why or why not? Should the Commission require that other aspects of a covered clearing agency's business and operations be subject to regular review?

19. Proposed Rule 17Ad-22(e)(22): Communication Procedures and Standards

Proposed Rule 17Ad-22(e)(22) would require a covered clearing agency to establish, implement, maintain and

enforce written policies and procedures reasonably designed to ensure that it uses, or at a minimum accommodates, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, and settlement.³⁵⁶ No comparable requirement exists for registered clearing agencies under Rule 17Ad-22(d). The Commission preliminarily believes this proposed requirement is appropriate for covered clearing agencies given a covered clearing agency's size and global operation. The Commission understands that covered clearing agencies currently use the relevant internationally accepted communication procedures and standards,³⁵⁷ so the Commission expects only limited changes may be necessary to satisfy the requirements of the proposed rule.

The ability of participants to communicate with a covered clearing agency in a timely, reliable, and accurate manner is important to achieving prompt and accurate clearance and settlement. The Commission preliminarily believes that requiring policies and procedures in line with internationally accepted communication procedures and standards is appropriate for a covered clearing agency for two reasons. First, internationally accepted communication procedures and standards, because they are widely accepted and adopted standards, reduce the likelihood of errors and technical complexity in the clearance and settlement process, thereby reducing risks and costs, improving efficiency, and reducing barriers to entry. Such procedures and standards would include standardized protocols for exchanging messages and reference data for identifying financial instruments and counterparties.

Second, internationally accepted communication procedures and standards ensure effective communication with direct and indirect participants, which the Commission preliminarily believes is important for covered clearing agencies, given the global nature of their businesses. Securities markets in the United States are among the largest and most actively traded in the world, with direct and indirect participants from numerous other countries that necessitate the

development and use of internationally accepted communication procedures and standards. Accordingly, the Commission preliminarily believes that covered clearing agencies are likely to be engaged in transactions across borders, where standardized communications protocols and mechanisms are essential to ensure prompt and accurate clearance and settlement.

Request for Comments. The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(22). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, and settlement? Why or why not?
- Is the Commission's assumption that covered clearing agencies are already using internationally accepted communication procedures correct? Why or why not?
- Has the Commission provided sufficient guidance on what "relevant internationally accepted communication procedures and standards" would be appropriate under the proposed policies and procedures requirement? Why or why not?

20. Proposed Rule 17Ad-22(e)(23): Disclosure of Rules, Key Procedures, and Market Data

Proposed Rule 17Ad-22(e)(23) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain clear and comprehensive rules and procedures that provide for the specific disclosures enumerated in the rule, as discussed below.³⁵⁸ The proposed rule would require such policies and procedures to specifically require a covered clearing agency to (i) publicly disclose all relevant rules and material procedures, including key aspects of its

³⁵⁵ See proposed Rule 17Ad-22(e)(23), *infra* Part 0; see also Parts 0 and 0 (discussing the specific disclosures enumerated in the proposed rule).

The Commission is proposing Rule 17Ad-22(e)(23) as part of a comprehensive set of rules for regulating covered clearing agencies that is consistent with and comparable to other domestic and international standards for FMIs.

The Commission notes that Rule 17Ad-22(c)(2) currently requires a registered clearing agency, within 60 days after the end of its fiscal year, to post on its Web site its annual audited financial statements. See 17 CFR 240.17Ad-22(c)(2); see also Clearing Agency Standards Release, *supra* note 5, at 66244.

³⁵⁶ See 15 U.S.C. 78q-1(a)(1)(B); see also 15 U.S.C. 78q-1(a)(1)(C) (Congress finding that new data processing and communications techniques create the opportunity for more efficient, effective, and safe procedures for clearance and settlement).

³⁵⁷ See proposed Rule 17Ad-22(e)(22), *infra* Part 0.

³⁵⁸ See generally Finacle, Messaging Standards in Financial Industry, (Infosys Thought Paper, 2012), available at <http://www.infosys.com/finacle/solutions/thought-papers/Documents/messaging-standards-financial-industry.pdf> (describing messaging standards such as SWIFT, FIX, and Fpml).

default rules and procedures; (ii) provide sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the covered clearing agency; and (iii) publicly disclose relevant basic data on transaction volume and values.³⁵⁹ As with public disclosures contemplated under proposed Rule 17Ad–22(a)(20), a covered clearing agency could comply with the proposed requirement by posting the relevant documentation to its Web site. The Commission preliminarily believes the proposed rule is appropriate to promote continued transparency at covered clearing agencies and thereby continue to facilitate prompt and accurate clearance and settlement.

Rule 17Ad–22(d)(9) currently requires registered clearing agencies to have policies and procedures to facilitate disclosures similar to proposed Rule 17Ad–22(e)(23)(ii), but does not require policies and procedures similar to proposed Rules 17Ad–22(e)(23)(i) and (iii). The Commission preliminarily believes these additional requirements are appropriate for a covered clearing agency given the risks that a covered clearing agency's size, operation, and importance pose to the U.S. securities markets because these disclosures provide the relevant authorities with information that further facilitates supervision of the covered clearing agency, including information that may allow the relevant authorities to better assess the covered clearing agency's observance of risk management requirements and better identify possible risks posed by the covered clearing agency, and provide relevant stakeholders with information regarding risks associated with participation in a covered clearing agency.

In addition to the Exchange Act requirements described above,³⁶⁰ Section 17A of the Exchange Act requires registered clearing agencies to have rules designed to foster cooperation and coordination with persons engaged in the clearance and settlement of securities transactions.³⁶¹ The Commission preliminarily believes

that requiring a covered clearing agency to have policies and procedures reasonably designed to disclose sufficient information so that participants can identify risks and costs associated with using the covered clearing agency would allow participants to make informed decisions about the use of the covered clearing agency and to take appropriate actions to mitigate their risks and to better understand the costs associated with their use of the covered clearing agency. Similarly, the Commission preliminarily believes that requiring a covered clearing agency to publicly disclose relevant basic data on transaction volume and values would allow regulators, market participants, and market observers to make informed decisions about the activities of the covered clearing agency and to take appropriate action, if necessary, in response.

Pursuant to existing Commission regulations, changes to the rules of an SRO, including clearing agencies, are required to be available on the SRO's Web site and are published by the Commission.³⁶² The Commission's proposed rule is designed to promote understanding among market participants of the policies and procedures of covered clearing agencies, and the Commission believes the proposed rule is consistent with existing requirements for SROs. Continued and improved understanding of the risks and costs associated with using a covered clearing agency's services should promote confidence generally in the covered clearing agency's ability to set and manage appropriately risks and costs, such as margin requirements, restrictions on or limitations of the covered clearing agency's obligations, and conditions used by the covered clearing agency to test the adequacy of its financial resources. The Commission preliminarily believes these requirements are especially important for covered clearing agencies given their size and importance.

The Commission notes that these policies and procedures requirements are intended in part to codify disclosure practices currently undertaken by some

registered clearing agencies on an elective basis.³⁶³

Below is a discussion of the specific disclosures required under the proposed rule, which are not similarly required of registered clearing agencies under Rule 17Ad–22(d)(9). The Commission preliminarily believes that these additions to a covered clearing agency's disclosure practices are important to ensure clearing members and the public have access to up-to-date information about the covered clearing agency's activities, policies, and procedures, which would promote confidence in its operations and thereby contribute to the prompt and accurate clearance and settlement of securities transactions.³⁶⁴

a. Comprehensive Public Disclosure

Proposed Rule 17Ad–22(e)(23)(iv) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain clear and comprehensive rules and procedures that provide for a comprehensive public disclosure of its material rules, policies, and procedures regarding governance arrangements and legal, financial, and operational risk management, accurate in all material respects at the time of publication, including (i) a general background of the covered clearing agency, including its function and the market it serves, basic data and performance statistics on its services and operations, such as basic volume and value statistics by product type, average aggregate intraday exposures to its participants, and statistics on the covered clearing agency's operational reliability, and a description of its general organization, legal and regulatory framework, and system design and operations; (ii) a standard-by-standard summary narrative for each applicable standard set forth in proposed Rules 17Ad–22(e)(1) through (22) with sufficient detail and context to enable the reader to understand its approach to controlling the risks and addressing the requirements in each standard; (iii) a summary of material changes since the last update of the disclosure; and (iv) an

³⁵⁹ In full, Rule 17Ad–22(d)(9) requires registered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide market participants with sufficient information for them to identify and evaluate the risks and costs associated with using its services. See 17 CFR 240.17Ad–22(d)(9); see also Clearing Agency Standards Release, *supra* note 5, at 66252–53.

³⁶⁰ See notes 54–56 and accompanying text; see also Parts 0 and 0 (generally discussing the regulatory framework under Section 17A of the Exchange Act, as amended by the Dodd-Frank Act).

³⁶¹ See 15 U.S.C. 78q–1(b)(3)(F).

³⁶² See 17 CFR 240.19b–4(l) (requiring an SRO to post each proposed rule change, and any amendments thereto, on its Web site within two business days of filing with the Commission); 17 CFR 240.19b–4(i) (requiring SROs to retain for public inspection and copying all filings made pursuant to this section and all correspondence and other communications reduced to writing, including comment letters, to and from such SRO concerning any such filing).

³⁶³ See, e.g., DTC, Assessment of Compliance with Recommendations for Securities Settlement Systems (Dec. 2011), available at <http://dtcc.com/legal/policy-and-compliance.aspx>.

³⁶⁴ As noted above, the Commission preliminarily believes that the proposed requirement for a comprehensive public disclosure is consistent with the requirements of the Exchange Act, Rule 19b–4, and the current practices of some clearing agencies that would be covered clearing agencies. See *supra* notes 362–363 and accompanying text; see also Part 0 (discussing the current practices of registered clearing agencies with respect to transparency and disclosure).

executive summary of the key points regarding each.³⁶⁵ The Commission is proposing to require that the comprehensive public disclosure provide basic data and performance statistics, such as statistics on the covered clearing agency's operational reliability so that the relevant stakeholders and the general public have data regarding, for example, performance targets for systems and the actual performance of systems over specified periods and targets for recovery. The Commission is also proposing to require that the comprehensive public disclosure include a standard-by-standard summary narrative to elicit a summary discussion of a covered clearing agency's implementation of policies and procedures requirements that would need to be established, implemented, maintained and enforced by a covered clearing agency in response to proposed Rules 17Ad-22(e)(1) through (23). In addition, the Commission is proposing to require a summary of material changes and would expect that a covered clearing agency should consider its particular circumstances, such as, for example, changes in the scope of services provided by the covered clearing agency, in satisfying this requirement.

The Commission preliminarily believes that disclosure of the above required information will provide participants with the information necessary to, at a minimum, identify and evaluate the risks and costs associated with use of the covered clearing agency, thereby promoting transparency and enhancing competition and market discipline. The Commission preliminarily believes it would also provide other stakeholders, including regulators and the public, with information that facilitates informed oversight and decision-making regarding covered clearing agencies.

b. Updates to the Comprehensive Public Disclosure

Proposed Rule 17Ad-22(e)(23)(v) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure the comprehensive public disclosure required under proposed Rule 17Ad-22(e)(23)(iv) is updated not less than every two years, or more frequently following changes to its system or the environment in which it operates to the extent necessary, to ensure statements previously provided remain accurate in

all material respects.³⁶⁶ The Commission preliminarily believes that ensuring statements previously provided remain accurate would require a covered clearing agency's comprehensive public disclosure to provide statements that would provide a market participant with an accurate representation of the risks and costs of participating in the covered clearing agency.

The Commission preliminarily believes that this requirement would help provide participants, regulators, other stakeholders, and the public with disclosures that are current, accurate, and comprehensive, thereby promoting transparency and enhancing competition and market discipline. The Commission preliminarily believes it would also provide other stakeholders, including regulators and the public, with timely information that facilitates informed oversight and decision-making regarding covered clearing agencies, thereby promoting the clearing agency obligations required under Section 17A of the Exchange Act.³⁶⁷

c. Request for Comments

The Commission generally requests comments on all aspects of proposed Rule 17Ad-22(e)(23). In addition, the Commission requests comments on the following specific issues:

- Should the Commission require a covered clearing agency's policies and procedures to maintain clear and comprehensive rules and procedures that provide for the specific disclosures proposed under Rule 17Ad-22(e)(23)? Why or why not? Are there rules and procedures that should not be fully disclosed to participants? Please explain in detail what such rules and procedures would be and why they should not be disclosed to participants.

- In imposing certain minimum requirements for policies and procedures regarding the comprehensive public disclosure, has the Commission provided sufficient guidance regarding what elements must appear in the disclosure? Should different elements appear? Should the Commission require policies and procedures to update the comprehensive public disclosure every two years, as proposed? Should the Commission require policies and procedures to update the comprehensive public disclosure more frequently following changes to its system or the environment in which it operates to the extent necessary to

ensure the statements provided remain accurate in all material respects? Why or why not?

- Are certain ways that covered clearing agencies communicate information to market participants more effective than others? For example, does including information in a covered clearing agency's rulebook or published interpretive materials provide adequate notice of the risks and costs of being a participant to persons that are not currently participants in the covered clearing agency? Why or why not?

- Should the types of information that a covered clearing agency discloses under the proposed rule be generally available to the public? Should any categories of the information required to be disclosed under the proposed rule be restricted to certain parties only, such as clearing members or the Commission itself? Why or why not?

- Should the Commission require covered clearing agencies to make public disclosures of information contained in their audited financial statements that would provide a discussion and analysis of the covered clearing agency's financial condition, in particular with respect to liquidity, capital resources, and results of operations, similar to the Management's Discussion and Analysis of Financial Condition and Results of Operations disclosure required under Items 303(a)(1) through (3) of Regulation S-K?

- Should the Commission require that policies and procedures pursuant to proposed Rule 17Ad-22(e)(23) specify a certain form for the disclosures (*e.g.*, using tagged or structured data)? Why or why not? What form should the proposed disclosures take? Please explain.

C. Proposed Rule 17Ab2-2

The Commission is proposing Rule 17Ab2-2 to establish procedures for the Commission to make determinations affecting covered clearing agencies.³⁶⁸ Under the proposed rule, the Commission would make determinations in three cases, as discussed below. In each case, under proposed Rule 17Ab2-2(d), the Commission would publish notice of its intention to consider such determinations, together with a brief statement of the grounds under consideration, and provide at least a 30-day public comment period prior to any determination.³⁶⁹ The Commission may provide the clearing agency subject to the proposed determination opportunity for hearing regarding the proposed

³⁶⁵ See proposed Rule 17Ad-22(e)(23)(iv), *infra* Part VI.

³⁶⁶ See proposed Rule 17Ad-22(e)(23)(v), *infra* Part VI.

³⁶⁷ See 15 U.S.C. 78q-1(b)(3)(F).

³⁶⁸ See proposed Rule 17Ab2-2, *infra* Part 0.

³⁶⁹ See proposed Rule 17Ab2-2(d), *infra* Part 0.

determination. Under proposed Rule 17Ab2-2(e), notice of determinations in each case would be given by prompt publication thereof, together with a statement of written reasons supporting the determination.³⁷⁰

The Commission notes that under proposed Rule 17Ad-22(e), five active registered clearing agencies would meet the definition of a covered clearing agency without action under proposed Rule 17Ab2-2 by the Commission.³⁷¹ Because the two dormant registered clearing agencies would not meet the definition of a covered clearing agency, if they elected to begin providing clearance and settlement services, they could potentially be subject to a determination under Rule 17Ab2-2.³⁷² In addition, the Commission notes that it would consider, upon receiving an application for registration as a clearing agency, either making a determination regarding a registrant's status as a covered clearing agency as part of the registration process, if the Commission believes the clearing agency already meets the definition of a covered clearing agency, or after registration, if the Commission determines that the clearing agency does not meet the definition of a covered clearing agency upon registration but does so at a later date, as either market conditions or the characteristics of the clearing agency itself change, pursuant to proposed Rule 17Ab2-2.³⁷³

1. Determination That a Registered Clearing Agency is a Covered Clearing Agency

Under proposed Rule 17Ab2-2(a), the Commission may, if it deems appropriate, upon application by any registered clearing agency or member thereof, or on its own initiative, determine whether a registered clearing agency should be considered a covered clearing agency.³⁷⁴ In determining whether a registered clearing agency should be considered a covered clearing agency, the Commission may consider characteristics such as the clearing of financial instruments that are

characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults or other such factors as it deems appropriate in the circumstances. The Commission preliminarily believes it should reserve the right to make a determination on its own initiative in the event that it independently determines that a registered clearing agency meets the definition of a covered clearing agency, as either market conditions or the characteristics of the clearing agency itself change. The Commission preliminarily believes that the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults are two factors that indicate a registered clearing agency may raise systemic risk concerns supporting application of the requirements under proposed Rule 17Ad-22(e).³⁷⁵

The Commission preliminarily believes that proposed Rule 17Ab2-2(a) would provide the Commission with the flexibility necessary to achieve the goals of Section 17A of the Exchange Act,³⁷⁶ Title VII of the Dodd-Frank Act,³⁷⁷ and the Clearing Supervision Act,³⁷⁸ given the ever-changing nature of the U.S. securities markets, including the nature and character of participants in the market and the products required to be cleared and settled in practice. The Commission preliminarily believes that Rule 17Ab2-2(a) is necessary to ensure that a registered clearing agency not otherwise meeting the definition of either a designated clearing agency or a complex risk profile clearing agency can nonetheless be subject to the requirements for covered clearing agencies in proposed Rule 17Ad-22(e) upon a determination made by the Commission. The Commission preliminarily believes this is necessary to ensure that the Commission is appropriately able to respond to registered clearing agencies that raise systemic risk concerns supporting application of the requirements under proposed Rule 17Ad-22(e).

³⁷⁵ See Clearing Agency Standards Release, *supra* note 5, at 66234 n.162 (describing the risks that arise from financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults).

³⁷⁶ See *supra* Part 0.

³⁷⁷ See *supra* Part 0.

³⁷⁸ See *supra* Part 0.

2. Determination That a Covered Clearing Agency Is Systemically Important in Multiple Jurisdictions

Under proposed Rule 17Ab2-2(b), the Commission may, if it deems appropriate, upon application by any clearing agency or member thereof, or on its own initiative, determine whether a covered clearing agency meets the definition of "systemically important in multiple jurisdictions."³⁷⁹ In determining whether a covered clearing agency is systemically important in multiple jurisdictions, the Commission may consider (i) whether the covered clearing agency is a designated clearing agency; (ii) whether the clearing agency has been determined to be systemically important by one or more jurisdictions other than the United States through a process that includes consideration of whether the foreseeable effects of a failure or disruption of the designated clearing agency could threaten the stability of each relevant jurisdiction's financial system;³⁸⁰ or (iii) such other factors as the Commission may deem appropriate in the circumstances.

The Commission preliminarily believes that it should propose the procedures set forth in Rule 17Ab2-2(b) for designating a covered clearing agency as systemically important in multiple jurisdictions. Accordingly, the Commission is proposing Rule 17Ab2-2(b) to provide procedures for determining when a clearing agency has become systemically important in multiple jurisdictions. In this regard, the Commission preliminarily believes that proposed Rule 17Ab2-2(b)(ii) is consistent with Section 804(a)(2)(D) of the Clearing Supervision Act.³⁸¹ The Commission is also proposing that it may consider additional factors in determining whether a covered clearing agency is systemically important in multiple jurisdictions, in addition to whether the foreseeable effects of a failure or disruption of the designated clearing agency could threaten the stability of multiple jurisdictions' financial systems. Such analysis could

³⁷⁹ See proposed Rule 17Ab2-2(b), *infra* Part 0.

³⁸⁰ The Commission notes that this provision of proposed Rule 17Ab2-2(b) parallels the definition of systemic importance in Section 803(9) of the Clearing Supervision Act, which states that systemic importance means a situation where the failure of or a disruption to the functioning of an FMU could create, or increase, the risk of significant liquidity or credit problems spreading among financial institutions or markets and thereby threaten the stability of the financial system of the United States. See 12 U.S.C. 5462(9).

³⁸¹ See 12 U.S.C. 5463(a)(2)(D) (listing, as one of the systemic importance criteria for the FSOC to consider, the effect that the failure of or a disruption to the FMU or PCS activity would have on critical markets, financial institutions, or the broader financial system).

³⁷⁰ See proposed Rule 17Ab2-2(e), *infra* Part 0.

³⁷¹ See *supra* notes 82-87 and accompanying text. As noted, the CFTC has been designated the supervisory agency for two registered clearing agencies, CME and ICE, which have been designated as systemically important by the FSOC pursuant to the Clearing Supervision Act, and accordingly they would not be covered clearing agencies under proposed Rules 17Ad-22(e) and 17Ab2-2.

³⁷² See *supra* note 88 and accompanying text.

³⁷³ See *supra* note 9 and accompanying text (discussing the requirements for registration as a clearing agency pursuant to Section 17A of the Exchange Act).

³⁷⁴ See proposed Rule 17Ab2-2(a), *infra* Part 0.

include whether foreign regulatory authorities have designated the covered clearing agency as systemically important and whether any findings were made in anticipation of that designation.

3. Determination That a Clearing Agency Has a More Complex Risk Profile

Under proposed Rule 17Ab2–2(c), the Commission may, if it deems appropriate, determine whether any of the activities of a clearing agency providing central counterparty services, in addition to clearing agencies registered with the Commission for the purpose of clearing security-based swaps, have a more complex risk profile.³⁸² In determining whether a clearing agency's activity has a more complex risk profile, the Commission may consider (i) characteristics such as the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults; and (ii) such other characteristics as it deems appropriate in the circumstances. The Commission preliminarily believes that the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults are two factors that indicate a registered clearing agency raises systemic risk concerns supporting application of the requirements under proposed Rule 17Ad–22(e).³⁸³

The Commission preliminarily believes that proposed Rule 17Ab2–2(c) would provide the Commission with the flexibility necessary to achieve the goals of Section 17A of the Exchange Act,³⁸⁴ Title VII of the Dodd-Frank Act,³⁸⁵ and the Clearing Supervision Act,³⁸⁶ given the dynamic nature of the U.S. securities markets, including the nature and character of participants in the market and the products required to be cleared and settled in practice, by permitting the Commission to determine that certain registered clearing agencies are complex risk profile clearing agencies. The Commission also preliminarily believes that activities involving a more complex risk profile, because they may involve the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant

defaults, implicate systemic risk concerns supporting application of the requirements under proposed Rule 17Ad–22(e).³⁸⁷

4. Request for Comments

The Commission generally requests comments on all aspects of proposed Rule 17Ab2–2. In addition, the Commission requests comments on the following specific issues:

- Should the Commission establish procedures for making determinations affecting covered clearing agencies? Why or why not?
- In determining whether a clearing agency should be considered a covered clearing agency, should the Commission consider characteristics such as the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults, as proposed? Why or why not? Are there particular other characteristics that the Commission should consider? If so, please explain the relevance of those characteristics in detail.
- Does the proposed rule sufficiently describe the types of factors that would be considered when the Commission considers a determination that a registered clearing agency is a covered clearing agency? What factors should be considered?
- Should the Commission, if it deems appropriate, determine whether a covered clearing agency is systemically important in multiple jurisdictions? Why or why not? If not, what alternative approach should the Commission use to assess whether a covered clearing agency is systemically important in multiple jurisdictions? For instance, what weight should the Commission give to determinations by other jurisdictions or regulators regarding the systemic importance in multiple jurisdictions of a covered clearing agency? Is it appropriate for the Commission to assess whether such determination was made through a process that includes consideration of whether the foreseeable effects of a failure or disruption of the designated clearing agency could threaten the stability of each relevant jurisdiction's financial system, as proposed? Please explain. Are there particular other factors that the Commission should consider? If so, please explain the relevance of those characteristics in detail.
- Does the proposed rule sufficiently describe the types of factors that would be considered when the Commission considers a determination that a covered

clearing agency is systemically important in multiple jurisdictions? What factors should be considered?

- In determining whether any of the activities of a clearing agency providing CCP services have a more complex risk profile, should the Commission consider characteristics such as the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults, as proposed? Why or why not? Are there particular other characteristics that the Commission should consider? If so, please explain the relevance of those characteristics in detail.

- Does the proposed rule sufficiently describe the types of factors that would be considered when the Commission considers a determination that a clearing agency is a complex risk profile clearing agency? What factors should be considered?

- Does the proposed process for determinations under Rule 17Ab2–2 conflict with the PFMI Report's use of "systemic importance in multiple jurisdictions" and "more complex risk profile" activities? If so, please explain.

D. Proposed Rule 17Ad–22(f)

The Commission is proposing Rule 17Ad–22(f) to codify its special enforcement authority over designated clearing agencies for which the Commission acts as the supervisory agency, pursuant to the Clearing Supervision Act. Under Section 807(c) of the Clearing Supervision Act, for purposes of enforcing the provisions of the Clearing Supervision Act, a designated clearing agency is subject to, and the Commission has authority under, the provisions of subsections (b) through (n) of Section 8 of the Federal Deposit Insurance Act in the same manner and to the same extent as if a designated clearing agency were an insured depository institution and the Commission were the appropriate Federal banking agency for such insured depository institution.³⁸⁸

Request for Comments. The Commission requests comment on proposed Rule 17Ad–22(f), including whether the proposed rule is clear and consistent with the requirements of the Exchange Act and the Clearing Supervision Act.

E. Proposed Amendment to Rule 17Ad–22(d)

To facilitate consistency with proposed Rule 17Ad–22(e), the

³⁸² See proposed Rule 17Ab2–2(c), *infra* Part 0.

³⁸³ See *supra* note 375 and accompanying text.

³⁸⁴ See *supra* Part 0.

³⁸⁵ See *supra* Part 0.

³⁸⁶ See *supra* Part 0.

³⁸⁷ See *supra* note 375 and accompanying text.

³⁸⁸ See 12 U.S.C. 5466(c); see also 12 U.S.C. 1818 (relevant provisions under the Federal Deposit Insurance Act).

Commission is proposing to amend Rule 17Ad-22(d). Rule 17Ad-22(d) sets forth certain minimum requirements for the operation and governance of registered clearing agencies.³⁸⁹ The first paragraph of Rule 17Ad-22(d) currently provides that a registered clearing agency shall establish, implement, maintain and enforce written policies and procedures reasonably designed to fulfill the requirements of Rule 17Ad-22(d), as applicable. The Commission is proposing to amend this first paragraph of Rule 17Ad-22(d) to state that Rule 17Ad-22(d) applies to registered clearing agencies other than covered clearing agencies.³⁹⁰ As a result, the proposed amendment would limit the applicability of Rule 17Ad-22(d) to CME and ICE, as systemically important FMUs for which the CFTC is the supervisory agency under the Clearing Supervision Act,³⁹¹ the two registered but dormant clearing agencies,³⁹² and any clearing agency registered with the Commission in the future that is not one of the following: a designated clearing agency, a complex risk profile clearing agency, or a clearing agency that the Commission has otherwise determined to be a covered clearing agency pursuant to proposed Rule 17Ab2-2.³⁹³

Request for Comments. The Commission requests comment on the proposed amendment to Rule 17Ad-22(d), including whether the proposed amendment is clear and consistent with the requirements of the Exchange Act, the Clearing Supervision Act, and proposed Rule 17Ad-22(e) thereunder.

III. Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (“PRA”)³⁹⁴ imposes certain requirements on federal agencies in connection with the conducting or sponsoring of any “collection of information.”³⁹⁵ More specifically, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number. Additionally, 44 U.S.C. 3507(a)(1)(D) provides that before adopting (or revising) a collection of information requirement, an agency must, among other things, publish a

notice in the **Federal Register** stating that the agency has submitted the proposed collection of information to the Office of Management and Budget (“OMB”) and setting forth certain required information, including (1) a title for the collection of information; (2) a summary of the collection information; (3) a brief description of the need for the information and the proposed use of the information; (4) a description of the likely respondents and proposed frequency of response to the collection of information; (5) an estimate of the paperwork burden that shall result from the collection of information; and (6) notice that comments may be submitted to the agency and director of OMB.³⁹⁶

Certain provisions of the proposed rules would impose new “collection of information” requirements within the meaning of the PRA. Accordingly, the Commission has submitted the information to the OMB for review in accordance with 44 U.S.C. 3507 and 5 CFR 1320.11. A title and control number already exists for Rule 17Ad-22 adopted in October 2012 (OMB Control No. 3235-0695 for “Clearing Agency Standards for Operation and Governance”). Because the Commission is proposing to revise the collection of information under this proposed rulemaking for amendments to Rule 17Ad-22, the Commission will use OMB Control No. 3235-0695 for the collections of information for proposed Rule 17Ad-22(e).

Additionally, proposed Rule 17Ab2-2 would contain a new collection of information requirement for PRA purposes. The title of the new collection of information under this proposed rulemaking is Determinations Affecting Covered Clearing Agencies (a proposed new collection of information).

A. Overview and Organization

The Commission preliminarily believes information that would be required to be collected by virtue of written policies and procedure requirements contained in this proposed rulemaking reflects to a degree existing practices at covered clearing agencies.³⁹⁷ In certain instances, however, the proposed requirements would require covered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to comply with this proposed rulemaking.

With regard to proposed Rule 17Ad-22(e), given that several provisions of the proposed rule are intended to be consistent with Rule 17Ad-22, the Commission preliminarily believes that covered clearing agencies currently in compliance with the requirements of existing Rule 17Ad-22 may already have some written rules and procedures similar to those in proposed Rule 17Ad-22(e). Accordingly, when covered clearing agencies review and update their policies and procedures in order to come into compliance with proposed Rule 17Ad-22(e), the Commission preliminarily believes that the PRA burden would vary across the requirements of proposed Rule 17Ad-22(e), based on the complexities of the requirements under each paragraph of the proposed rule and the extent to which covered clearing agencies currently comply with the proposed requirements under their existing policies and procedures.³⁹⁸

The portions of proposed Rule 17Ad-22(e) for which the PRA burden is preliminarily expected to be higher are the provisions contemplating requirements not addressed in Rule 17Ad-22, as discussed in Part II.A.4. Because these proposed requirements may not reflect established practices of covered clearing agencies or reflect the normal course of their activities, the PRA burden for these proposed rules may entail both initial one-time burdens to create new written policies and procedures and ongoing burdens. The expected PRA burden for the proposed rules is discussed in detail below.³⁹⁹

In addition to the collection of information requirements imposed under proposed Rule 17Ad-22(e), proposed Rule 17Ab2-2 also would contain collection of information requirements for PRA purposes. Proposed Rule 17Ab2-2 establishes a process for making determinations regarding whether or not a clearing agency would be a covered clearing agency and whether a covered clearing agency is either involved in activities with a more complex risk profile or systemically important in multiple jurisdictions.⁴⁰⁰ The expected PRA burden for proposed Rule 17Ab2-2 is discussed below.

³⁸⁹ See 17 CFR 240.17Ad-22(d); see also Clearing Agency Standards Release, *supra* note 5, at 66244-58.

³⁹⁰ See proposed amendment to Rule 17Ad-22(d), *infra* Part 0.

³⁹¹ See *supra* notes 84-87 and accompanying text.

³⁹² See *supra* note 88 and accompanying text (discussing SCCP and BSECC).

³⁹³ See *supra* Part 0 (further discussing the scope of the proposed rules).

³⁹⁴ 44 U.S.C. 3501 *et seq.*

³⁹⁵ See 44 U.S.C. 3502(3).

³⁹⁶ See 44 U.S.C. 3507(a)(1)(D); see also 5 CFR 1320.5(a)(1)(iv).

³⁹⁷ See *infra* Part 0 (describing current practices at registered clearing agencies).

³⁹⁸ For a discussion of the differences between Rule 17Ad-22(d) and proposed Rule 17Ad-22(e), see Parts 0-0.

³⁹⁹ See *infra* Parts 0 (estimated burdens under proposed Rule 17Ad-22(e)(15)) and 0 (estimated burdens under proposed Rule 17Ad-22(e)(19)).

⁴⁰⁰ See *infra* Part 0 (further discussing the purpose, scope, and application of proposed Rule 17Ab2-2) and Part 0 (proposed text of Rule 17Ab2-2).

B. Summary of Collection of Information and Proposed Use of Information for Proposed Rule 17Ad-22(e)⁴⁰¹ and Proposed Rule 17Ab2-2

1. Proposed Rules 17Ad-22(e)(1) through (3): General Organization

a. Proposed Rule 17Ad-22(e)(1)

Proposed Rule 17Ad-22(e)(1) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a well-founded, clear, transparent and enforceable legal basis for each aspect of its activities in all relevant jurisdictions.⁴⁰² The purpose of this collection of information is to reduce the legal risks involved in the clearance and settlement process and to ensure that a covered clearing agency's policies and procedures do not cause legal uncertainty among participants due to a lack of clarity, completeness, or conflicts with applicable laws and judicial precedent.

b. Proposed Rule 17Ad-22(e)(2)

Proposed Rule 17Ad-22(e)(2) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for governance arrangements that are clear and transparent, clearly prioritize the safety and efficiency of the covered clearing agency, and support the public interest requirements of Section 17A of the Exchange Act, and the objectives of owners and participants. Proposed Rule 17Ad-22(e)(2) would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for governance arrangements reasonably designed to establish that the covered clearing agency's board of directors and senior management have appropriate experience and skills to discharge their duties and responsibilities.⁴⁰³

The purpose of this collection of information is to promote boards of directors that are composed of qualified members and that exercise oversight of the covered clearing agency's management, while also prioritizing the safety and efficiency of the covered

clearing agency and supporting the public interest.

c. Proposed Rule 17Ad-22(e)(3)

Proposed Rule 17Ad-22(e)(3) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, general business, investment, custody, and other risks that arise in or are borne by the covered clearing agency. Under the proposed rule, risk management policies, procedures, and systems must provide for the identifying, measuring, monitoring, and managing of risks that arise in or are borne by the covered clearing agency. Such policies and procedures must be subject to review on a specified periodic basis and be approved by the board of directors annually. The proposed rule would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for plans for the recovery and orderly wind-down of the covered clearing agency in the event of credit losses, liquidity shortfalls, losses from general business risk, or any other losses. The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish that risk management and internal audit personnel have sufficient resources, authority, and independence from management. The proposed rule would further require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish that risk management and internal audit personnel have a direct reporting line to, and are overseen by, a risk management committee and an audit committee of the board of directors, respectively. The proposed rule would also require policies and procedures providing for an independent audit committee.⁴⁰⁴

The purpose of this collection of information is to enhance a covered clearing agency's ability to identify, monitor, and manage the risks clearing agencies face, including by subjecting the relevant policies and procedures to regular review, and to facilitate an orderly recovery and wind-down process in the event that a covered

clearing agency is unable to continue operating as a going concern.

2. Proposed Rules 17Ad-22(e)(4) Through (7): Financial Risk Management

a. Proposed Rule 17Ad-22(e)(4)

Proposed Rule 17Ad-22(e)(4) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively identify, measure, monitor, and manage its credit exposures to each participant and those exposures arising from payment, clearing, and settlement processes. Proposed Rule 17Ad-22(e)(4)(i) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to cover its credit exposure to each member fully with a high degree of confidence. To the extent not already maintained pursuant to proposed Rule 17Ad-22(e)(4)(i), a covered clearing agency that provides CCP services would also have to establish, implement, maintain, and enforce written policies and procedures to meet either the "cover one" requirement under proposed Rule 17Ad-22(e)(4)(iii) or, if it is a complex risk profile clearing agency or systemically important in multiple jurisdictions, the "cover two" requirement under proposed Rule 17Ad-22(e)(4)(ii).

Proposed Rule 17Ad-22(e)(4)(iv) would require covered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures by including prefunded financial resources and excluding assessments for additional guaranty fund contributions or other resources that are not prefunded, when calculating financial resources available to meet the requirements under proposed Rules 17Ad-22(e)(4)(i) through (iii), as applicable.⁴⁰⁵

Proposed Rule 17Ad-22(e)(4)(v) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain the financial resources required under proposed Rules 17Ad-22(e)(4)(i) through (iii), as applicable, in combined or separately maintained clearing or guaranty funds, and to test the sufficiency of its total financial resources by conducting a stress test of total financial resources once each day

⁴⁰¹ Proposed Rule 17Ad-22(e) would require covered clearing agencies to establish, implement, maintain and enforce certain written policies and procedures that would be used, among other things, in connection with staff examinations.

⁴⁰² See *supra* Part 0 (discussing proposed Rule 17Ad-22(e)(1)) and *infra* Part 0 (providing the proposed rule text).

⁴⁰³ See *supra* Part 0 (discussing proposed Rule 17Ad-22(e)(2)) and *infra* Part 0 (providing the proposed rule text).

⁴⁰⁴ See *supra* Part 0 (discussing proposed Rule 17Ad-22(e)(3)) and *infra* Part 0 (providing the proposed rule text).

⁴⁰⁵ See *supra* Part 0 (discussing proposed Rule 17Ad-22(e)(4)) and *infra* Part 0 (providing the proposed rule text).

using standard predetermined parameters and assumptions.

Proposed Rule 17Ad–22(e)(4)(vi) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to test the sufficiency of its total financial resources available to meet the minimum financial resource requirements under proposed Rules 17Ad–22(e)(4)(i) through (iii), as applicable, by conducting stress tests and other comprehensive analyses. Specifically, those would include conducting a stress test of its total financial resources once each day using standard predetermined parameters and assumptions. It would also include conducting a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions, and considering modifications to ensure that they are appropriate for determining the covered clearing agency's required level of default protection in light of current market conditions. It would also include conducting a comprehensive analysis of stress testing scenarios, models, and underlying parameters and assumptions more frequently than monthly when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by its participants increases significantly. It would also include reporting the results of this analysis to appropriate decision makers, including its risk management committee or board of directors, and to use these results to evaluate the adequacy of and adjust its margin methodology, model parameters, models used to generate clearing or guaranty fund requirements, and any other relevant aspects of its credit risk management policies and procedures, in supporting compliance with the minimum financial resources requirements discussed above.

Finally, proposed Rule 17Ad–22(e)(4)(vii) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require the covered clearing agency to perform a conforming model validation for its credit risk models at least annually, or more frequently if dictated by the covered clearing agency's risk management policies and procedures established under proposed Rule 17Ad–22(e)(3).⁴⁰⁶

b. Proposed Rule 17Ad–22(e)(5)

Rule 17Ad–22(e)(5) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to limit the assets it accepts as collateral to those with low credit, liquidity, and market risks. It also would require policies that set and enforce appropriately conservative haircuts and concentration limits if the covered clearing agency requires collateral to manage its or its participants' credit exposure and would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require a not-less-than-annual review of the sufficiency of its collateral haircut and concentration limits.⁴⁰⁷

c. Proposed Rule 17Ad–22(e)(6)

Proposed Rule 17Ad–22(e)(6) would require a covered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system. The proposed rule would require such margin system to consider, and produce margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market. Furthermore, under the proposed rule the margin system would mark participant positions to market and collect margin, including variation margin or equivalent charges if relevant, at least daily, and include the authority and operational capacity to make intraday margin calls in defined circumstances. The proposed rule also requires policies and procedures with respect to the following: The calculation of margin sufficient to cover a covered clearing agency's potential future exposure to participants in the interval between the last margin collection and close out of positions following a participant default; the use of reliable sources of timely price data and procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable; and the use of an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products.⁴⁰⁸

⁴⁰⁷ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(5)) and *infra* Part 0 (providing the proposed rule text).

⁴⁰⁸ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(6)) and *infra* Part 0 (providing the proposed rule text).

In addition to requiring policies and procedures with respect to a risk-based margin system, proposed Rule 17Ad–22(e)(6) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to regularly review, test, and verify risk-based margin systems by conducting backtests at least once each day and, at least monthly, a conforming sensitivity analysis of its margin resources and its parameters and assumptions for backtesting, and consider modifications to ensure the backtesting practices are appropriate for determining the adequacy of its margin resources. Such review, testing, and verification would include conducting a conforming sensitivity analysis more frequently than monthly when the products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by participants increase or decrease significantly. The proposed rule would also require a covered clearing agency providing CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to report the results of such conforming sensitivity analysis to appropriate decision makers, including its risk management committee or board of directors, and use these results to evaluate the adequacy of and adjust its margin methodology, model parameters, and any other relevant aspects of its credit risk management policies and procedures. Finally, under such policies and procedures, a not less than annual conforming model validation would be required for the covered clearing agency's margin system and related models.⁴⁰⁹

d. Proposed Rule 17Ad–22(e)(7)

Proposed Rule 17Ad–22(e)(7) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively measure, monitor, and manage the liquidity risk that arises in or is borne by the covered clearing agency, including measuring, monitoring, and managing its settlement and funding flows on an ongoing and timely basis and its use of intraday liquidity. Under the proposed rule, a covered clearing agency would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient liquid resources in all relevant currencies to effect same-day and,

⁴⁰⁶ See *id.*

⁴⁰⁹ See *id.*

where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that includes the default of the participant family that would generate the largest aggregate payment obligation for it in extreme but plausible market conditions. Under such policies and procedures, use of access to accounts and services at a Federal Reserve Bank, pursuant to Section 806 of the Clearing Supervision Act,⁴¹⁰ or other relevant central bank, when available and where determined to be practical by the board of directors of the covered clearing agency, would be required.⁴¹¹

For the purposes of meeting such liquid resource requirements, a covered clearing agency would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to require the holding of qualifying liquid resources in each relevant currency for which clearing activities are performed, limited to (i) cash at the central bank of issue or at creditworthy commercial banks; (ii) assets that are readily available and convertible into cash through prearranged funding arrangements without material adverse change provisions, such as committed lines of credit, committed foreign exchange swaps, committed repurchase agreements, and other prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the board of directors, following an annual review conducted for this purpose; and (iii) other assets that are readily available and eligible for pledging to (or conducting other appropriate forms of transactions with) a relevant central bank, provided that the covered clearing agency had access to routine credit at the central bank.

With respect to a covered clearing agency's sources of liquidity, the proposed rule would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to undertake due diligence to confirm that it has a reasonable basis to believe each of its liquidity providers, whether or not such liquidity provider is a clearing member, has sufficient information to understand and manage the liquidity provider's liquidity risks, and the capacity to perform as required under its commitments to provide liquidity.

Furthermore, under such policies and procedures, on at least an annual basis, a covered clearing agency would be required to maintain and test with each liquidity provider to the extent practicable the covered clearing agency's procedures and operational capacity for accessing each type of liquidity resource by conducting stress testing of its liquidity resources using standard and predetermined parameters and assumptions at least once each day. Additionally, a covered clearing agency would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to determine the amount and regularly test the sufficiency of the liquid resources held for purposes of meeting the minimum liquid resource requirement by (i) conducting a stress test of its liquidity resources using standard and predetermined parameters and assumptions at least once each day; and (ii) conducting a comprehensive analysis of the existing stress testing scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources, and considering modifications to ensure they are appropriate in light of current and evolving market conditions at least once a month and more frequently when products cleared or markets served display high volatility, become less liquid, or when the size or concentration of positions held by participants increase significantly.⁴¹²

Under such policies and procedures required by the proposed rule, stress test results must be reported to appropriate decision makers, including the risk management committee or board of directors, at the covered clearing agency for use in evaluating the adequacy of and adjusting its liquidity risk management policies and procedures. A covered clearing agency would also be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to perform an annual conforming model validation of its liquidity risk models and would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to address foreseeable liquidity shortfalls that would not be covered by its liquid resources and to seek to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations. Additionally, a covered clearing agency would be required to establish, implement, maintain and

enforce written policies and procedures that describe the covered clearing agency's process to replenish any liquid resources that may be employed during a stress event.⁴¹³

Finally, a covered clearing agency would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to require the covered clearing agency to undertake an analysis at least once a year that evaluates the feasibility of maintaining sufficient liquid resources at a minimum in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions if the covered clearing agency provides central counterparty services and is either systemically important in multiple jurisdictions or a clearing agency involved in activities with a more complex risk profile.

The purpose of this information collection is to enable a covered clearing agency to be able to effectively identify and limit exposures to participants, to maintain sufficient collateral or margin, and to satisfy all of its settlement obligations in the event of a participant default.

3. Proposed Rules 17Ad–22(e)(8) Through (10): Settlement

a. Proposed Rule 17Ad–22(e)(8)

Proposed Rule 17Ad–22(e)(8) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to define the point at which settlement is final no later than the end of the day on which the payment or obligation is due and, where necessary or appropriate, either intraday or in real time.⁴¹⁴

b. Proposed Rule 17Ad–22(e)(9)

Proposed Rule 17Ad–22(e)(9) would require covered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to have the covered clearing agency conduct its money settlements in central bank money, where available and determined to be

⁴¹⁰ 12 U.S.C. 5465(a).

⁴¹¹ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(7)) and *infra* Part 0 (providing the proposed rule text).

⁴¹² See *id.*

⁴¹³ See *id.*

⁴¹⁴ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(8)) and *infra* Part 0 (providing the proposed rule text).

practical by the board of directors of the covered clearing agency, and minimize and manage credit and liquidity risk arising from the clearing agency's money settlements in commercial bank money where central bank money is not used.⁴¹⁵

c. Proposed Rule 17Ad–22(e)(10)

Proposed Rule 17Ad–22(e)(10) would require a covered clearing agency to establish, implement, maintain and enforce written policies reasonably designed to set forth transparent written standards regarding a clearing agency's obligations with respect to the delivery of physical instruments, as well as operational practices that identify, monitor, and manage the risk associated with such physical deliveries.⁴¹⁶

The purpose of this information collection is to promote consistent standards of timing and reliability in the settlement process, promote reliability in a covered clearing agency's settlement operations, and to provide a covered clearing agency's participants with information necessary to evaluate the risks and costs associated with participation in the covered clearing agency.

4. Proposed Rules 17Ad–22(e)(11) Through (12): CSDs and Exchange-of-Value Settlement Systems

The purpose of this collection of information is to reduce securities transfer processing costs and risks associated with securities settlement and custody, increase the speed and efficiency of the settlement process, and eliminate risk in transactions with linked obligations.

a. Proposed Rule 17Ad–22(e)(11)

Proposed Rule 17Ad–22(e)(11) would require a covered CSD to establish, implement, maintain and enforce written policies and procedures reasonably designed to implement internal auditing and other controls to safeguard the rights of securities issuers and holders and prevent the unauthorized creation or deletion of securities. A covered CSD would also be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to conduct periodic and at least daily reconciliation of securities issues that the CSD maintains. Additionally, the proposed rule would require a covered CSD to establish, implement, maintain

and enforce written policies and procedures reasonably designed to maintain securities in an immobilized or dematerialized form, ensure the integrity of securities issues, and minimize and manage the risks associated with the safekeeping and transfer of securities, as well as protect assets against custody risk.⁴¹⁷

b. Proposed Rule 17Ad–22(e)(12)

Proposed Rule 17Ad–22(e)(12) would require a covered clearing agency that settles transactions involving the settlement of two linked obligations to establish, implement, maintain and enforce written policies and procedures reasonably designed to eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other, irrespective of whether the covered clearing agency settles on a gross or net basis and when finality occurs.⁴¹⁸

5. Proposed Rules 17Ad–22(e)(13) Through (14): Default Management

The purpose of this collection of information is to facilitate the functioning of a covered clearing agency in the event that a participant fails to meet its obligations, as well as limit the extent to which a participant's failure can spread to other participants or the covered clearing agency itself, and to ensure the safe and effective holding and transfer of customers' positions and collateral in the event of a participant's default or insolvency.

a. Proposed Rule 17Ad–22(e)(13)

Proposed Rule 17Ad–22(e)(13) would require covered clearing agencies providing CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that a covered clearing agency subject to this rule has sufficient authority and operational capability to contain losses and liquidity demands in a timely fashion and continue to meet its own obligations. The proposed rule would also require that a covered clearing agency subject to the rule establish, implement, maintain and enforce written policies and procedures reasonably designed to address the allocation of credit losses it may face if its collateral or other resources are insufficient to fully cover its credit exposures, describe the process whereby the clearing agency would replenish any

financial resources it may use following a default or other event in which the use of such resources is contemplated, and require participants and other stakeholders, to the extent applicable, to participate in the testing and review of its default procedures, including any close out procedures. Under such policies and procedures, the testing and review must occur at least annually and following any material changes thereto.⁴¹⁹

b. Proposed Rule 17Ad–22(e)(14)

Proposed Rule 17Ad–22(e)(14) would require a covered clearing agency that provides CCP services for security-based swaps or engages in activities that the Commission has determined to have a more complex risk profile to establish, implement, maintain and enforce written policies and procedures reasonably designed to enable the segregation and portability of positions of a participant's customers and collateral and effectively protect such positions and collateral from the default or insolvency of that participant.⁴²⁰

6. Proposed Rules 17Ad–22(e)(15) Through (17): General Business and Operational Risk Management

The purpose of this collection of information is to mitigate the potential impairment of a covered clearing agency as a result of a decline in revenues or increase in expenses, to limit disruptions that may impede the proper functioning of a covered clearing agency, and to improve the ability of a covered clearing agency to meet its settlement obligations.

a. Proposed Rule 17Ad–22(e)(15)

Proposed Rule 17Ad–22(e)(15) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that the covered clearing agency can continue operations and services as a going concern if losses materialize. Covered clearing agencies would also be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to determine the amount of liquid net assets funded by equity based upon the general risk profile of that clearing agency and the

⁴¹⁵ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(9)) and *infra* Part 0 (providing the proposed rule text).

⁴¹⁶ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(10)) and *infra* Part 0 (providing the proposed rule text).

⁴¹⁷ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(11)) and *infra* Part 0 (providing the proposed rule text).

⁴¹⁸ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(12)) and *infra* Part 0 (providing the proposed rule text).

⁴¹⁹ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(13)) and *infra* Part 0 (providing the proposed rule text).

⁴²⁰ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(14)) and *infra* Part 0 (providing the proposed rule text).

length of time necessary to achieve recovery or orderly wind-down. The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to hold liquid net assets funded by equity in an amount equal to the greater of either six months of current operating expenses or the amount determined by the agency's board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services. Under such policies and procedures, these resources are to be held in addition to resources held to cover participant default or other risks and must be of high quality and sufficiently liquid. Furthermore, under such policies and procedures, a covered clearing agency would be required to maintain a viable plan for raising additional equity in the event that its equity falls close to, or below, the required amount, and the plan would be required to be approved by the board of directors and updated at least annually.⁴²¹

b. Proposed Rule 17Ad–22(e)(16)

Proposed Rule 17Ad–22(e)(16) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to safeguard its own assets, as well as the assets of its participants, and to minimize the risk of loss and delay in access to such assets. A covered clearing agency would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to invest such assets in instruments with minimal credit, market and liquidity risks.⁴²²

c. Proposed Rule 17Ad–22(e)(17)

Proposed Rule 17Ad–22(e)(17) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to manage operational risk. A covered clearing agency would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. A covered

clearing agency would also be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that systems have a high degree of security, resiliency, operational reliability, and adequate, scalable capacity. The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish and maintain a business continuity plan that addresses events posing a significant risk of disrupting operations.⁴²³

7. Proposed Rules 17Ad–22(e)(18) Through (20): Access

The purpose of the collection of information is to enable a covered clearing agency to ensure that only entities with sufficient financial and operational capacity are direct participants in the covered clearing agency while ensuring that all qualified persons can access a covered clearing agency's services; to enable a covered clearing agency to monitor that participation requirements are met on an ongoing basis and to identify a participant experiencing financial difficulties before the participant fails to meet its settlement obligations; and to enable a covered clearing agency to identify and manage risks posed by non-member entities.

a. Proposed Rule 17Ad–22(e)(18)

Proposed Rule 17Ad–22(e)(18) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access by direct and, where relevant, indirect participants and other FMUs, and require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency. A covered clearing agency would also be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to monitor compliance with such participation requirements on an ongoing basis.⁴²⁴

b. Proposed Rule 17Ad–22(e)(19)

Proposed Rule 17Ad–22(e)(19) would require a covered clearing agency to

establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage the material risks to the covered clearing agency arising from arrangements in which firms that are indirect participants rely on services provided by direct participants to access the covered clearing agency's payment, clearing, or settlement facilities.⁴²⁵

c. Proposed Rule 17Ad–22(e)(20)

Proposed Rule 17Ad–22(e)(20) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify, monitor, and manage risks related to any link with one or more other clearing agencies, FMUs, or trading markets.⁴²⁶

8. Proposed Rules 17Ad–22(e)(21) Through (22): Efficiency

The purpose of this collection of information is to ensure that the services provided by a covered clearing agency do not become inefficient and to promote the sound operation of a covered clearing agency. The collection of information is also intended to ensure the prompt and accurate clearance and settlement of securities transactions by enabling participants to communicate with a clearing agency in a timely, reliable, and accurate manner.

a. Proposed Rule 17Ad–22(e)(21)

Proposed Rule 17Ad–22(e)(21) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require the covered clearing agency to be efficient and effective in meeting the requirements of its participants and the markets it serves. Additionally, the rule would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to have the management of a covered clearing agency regularly review the efficiency and effectiveness of the covered clearing agency's (i) clearing and settlement arrangement; (ii) operating structure, including risk management policies, procedures, and systems; (iii) scope of products cleared, settled, or recorded; and (iv) use of technology and communications procedures.⁴²⁷

⁴²¹ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(15)) and *infra* Part 0 (providing the proposed rule text).

⁴²² See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(16)) and *infra* Part 0 (providing the proposed rule text).

⁴²³ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(17)) and *infra* Part 0 (providing the proposed rule text).

⁴²⁴ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(18)) and *infra* Part 0 (providing the proposed rule text).

⁴²⁵ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(19)) and *infra* Part 0 (providing the proposed rule text).

⁴²⁶ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(20)) and *infra* Part 0 (providing the proposed rule text).

⁴²⁷ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(21)) and *infra* Part 0 (providing the proposed rule text).

b. Proposed Rule 17Ad–22(e)(22)

Proposed Rule 17Ad–22(e)(22) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to use, or at a minimum, accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, and settlement.⁴²⁸

9. Proposed Rule 17Ad–22(e)(23): Disclosure

Proposed Rule 17Ad–22(e)(23) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain clear and comprehensive rules and procedures that provide for (i) publicly disclosing all relevant rules and material procedures, including key aspects of default rules and procedures; (ii) providing sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs incurred by participating in a covered clearing agency; and (iii) publicly disclosing relevant basic data on transaction volume and values. The proposed rule would also require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain clear and comprehensive rules and procedures that provide for a comprehensive public disclosure of its material rules, policies, and procedures regarding governance arrangements and legal, financial, and operational risk management that is accurate in all material respects at the time of publication and to update this public disclosure every two years, or more frequently following changes to the clearing agency's system or the environment in which it operates to the extent necessary to ensure that previous statements remain accurate in all material respects.⁴²⁹ The purpose of the collection of information is to ensure that participants, as well as prospective participants, are provided with a complete picture of the covered clearing agency's operations and risk mitigation procedures in order to be able to fully and clearly understand the risks and responsibilities of participation in a clearing agency.

⁴²⁸ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(22)) and *infra* Part 0 (providing the proposed rule text).

⁴²⁹ See *supra* Part 0 (discussing proposed Rule 17Ad–22(e)(23)) and *infra* Part 0 (providing the proposed rule text).

10. Proposed Rule 17Ab2–2

Proposed Rule 17Ab2–2 establishes a process for making determinations regarding whether a clearing agency is a covered clearing agency and whether a covered clearing agency is either involved in activities with a more complex risk profile or systemically important in multiple jurisdictions.⁴³⁰ Each of these determinations may be initiated by a registered clearing agency, a member of the clearing agency, or upon the Commission's own initiative.⁴³¹ In each case, under proposed Rule 17Ab2–2(d), the Commission would publish notice of its intention to consider such determinations, together with a brief statement of the grounds under consideration, and provide at least a 30-day public comment period prior to any determination. Under proposed Rule 17Ab2–2(e), notice of determinations in each case would be given prompt publication by the Commission, together with a statement of written reasons supporting the determination.

C. Respondents

The Commission estimates that the majority of the proposed requirements under proposed Rule 17Ad–22(e) would apply to five registered clearing agencies. The proposed requirements in proposed Rules 17Ad–22(e)(1) through (23) would impose a PRA burden on covered clearing agencies. A covered clearing agency is defined under proposed Rule 17Ad–22(a)(7) as any designated clearing agency, clearing agency involved in activities with a more complex risk profile for which the CFTC is not the supervisory agency as defined in Section 803(8) of the Clearing Supervision Act, or a clearing agency determined by the Commission to be a covered clearing agency pursuant to proposed Rule 17Ab2–2.⁴³² A designated clearing agency is defined under proposed Rule 17Ad–22(a)(8) as a registered clearing agency that has been designated systemically important by the FSOC.⁴³³ The FSOC has designated six registered clearing agencies as

⁴³⁰ See *infra* Part 0 (further discussing the purpose, scope, and application of proposed Rule 17Ab2–2) and Part 0 (proposed text of Rule 17Ab2–2).

⁴³¹ See proposed Rule 17Ab2–2(a), *infra* Part 0.

⁴³² See proposed Rule 17Ad–22(a)(7), *infra* Part 0; see also *supra* Part 0 (describing the scope of proposed Rule 17Ad–22(e) and defining "covered clearing agency").

⁴³³ See proposed Rule 17Ad–22(a)(8), *infra* Part 0; see also *supra* Part 0 (describing the scope of proposed Rule 17Ad–22(e) and defining "designated clearing agency"); *supra* Part 0 (describing designation as systemically important by the FSOC under the Clearing Supervision Act).

systemically important.⁴³⁴ The Commission is the supervisory agency with respect to four of these designated clearing agencies, and the CFTC is the supervisory agency for the remaining two.⁴³⁵ Accordingly, proposed Rule 17Ad–22(e) would apply to the four designated clearing agencies for which the Commission is the supervisory agency.⁴³⁶

In addition to the four designated clearing agencies for which the Commission is the supervisory agency, a fifth clearing agency would also be subject to the proposed rules as a complex risk profile clearing agency that provides CCP services for security-based swaps for which the CFTC is not the supervisory agency under the Clearing Supervision Act.⁴³⁷

While the proposed rules would be applicable to the five registered clearing agencies currently captured by the definition of covered clearing agency, the Commission estimates that two additional entities may seek to register with the Commission and that one of these entities may seek to register in order to provide CCP services for security-based swaps. Upon registration, these two entities may be deemed covered clearing agencies and would be subject to proposed Rule 17Ad–22(e).

The number of covered clearing agencies subject to proposed Rule 17Ad–22(e) could increase if the FSOC designates additional clearing agencies as systemically important.⁴³⁸ Additionally, the Commission could determine additional clearing agencies to be covered clearing agencies under proposed Rule 17Ab2–2,⁴³⁹ subjecting them to the provisions of proposed Rule 17Ad–22(e). While the number of clearing agencies subject to proposed Rule 17Ad–22(e) could increase, the Commission is not able to predict whether the FSOC will exercise its authority in the future to designate additional clearing entities as systemically important FMUs or whether the Commission will determine additional clearing agencies to be covered clearing agencies. As a result, for the purposes of the PRA analysis, the Commission is preliminarily estimating that there would be seven respondents for a majority of the proposed requirements under proposed Rule

⁴³⁴ See *supra* note 38 and accompanying text.

⁴³⁵ See *supra* note 41 and accompanying text.

⁴³⁶ See *supra* notes 82, 84–87, and accompanying text.

⁴³⁷ See *supra* note 83 and accompanying text.

⁴³⁸ See *supra* Part 0, in particular notes 27–28, 38–41, and accompanying text.

⁴³⁹ See *supra* Part 0 (discussing the purpose, scope, and application of proposed Rule 17Ab2–2) and Part 0 (proposed text of Rule 17Ab2–2).

17Ad–22(e). With regard to proposed Rule 17Ad–22(e)(6), the number of respondents would be six because the proposed rule would apply to covered clearing agencies that provide CCP services. With regard to proposed Rule 17Ad–22(e)(11), the number of respondents would be one because the proposed rule would apply to covered clearing agencies that provide CSD services. With regard to proposed Rule 17Ad–22(e)(14), the number of respondents would be two because the proposed rule would apply to covered clearing agencies that provide CCP services for security-based swaps.

With regard to proposed Rule 17Ab2–2, the Commission preliminarily estimates for purposes of the PRA analysis that two registered clearing agencies or their members on their behalf will apply for a Commission determination, or may be subject to a Commission-initiated determination, regarding whether the registered clearing agency is a covered clearing agency, whether a registered clearing agency is involved in activities with a more complex risk profile, or whether a covered clearing agency is systemically important in multiple jurisdictions.

D. Total Annual Reporting and Recordkeeping Burden for Proposed Rule 17Ad–22(e)

The Commission preliminarily believes that the potential PRA burden imposed by the requirements under proposed Rule 17Ad–22(e) will vary depending on the requirement in question because registered clearing agencies are subject to existing requirements under Rule 17Ad–22 that, in some cases, are similar to those in proposed Rule 17Ad–22(e), as discussed in Part II.

First, because proposed Rules 17Ad–22(e)(1), (8) through (10), (12), (14),⁴⁴⁰ (16), and (22)⁴⁴¹ contain requirements

that are either substantially similar to those under existing Rule 17Ad–22 or have current practices that the Commission understands largely conform with the proposed rules, the Commission preliminarily believes that covered clearing agencies may need to make only limited changes to update their policies and procedures to satisfy these proposed requirements. In these cases, as an example, a covered clearing agency may need to conduct a review of the proposed rule against its existing policies and procedures to confirm that it satisfies the proposed requirements.⁴⁴²

Second, because proposed Rules 17Ad–22(e)(2), (3), (5), (11), (13), (17), (18), (20), and (21) contain provisions that are similar to those under existing Rule 17Ad–22 but would impose additional requirements that do not appear in existing Rule 17Ad–22, the Commission preliminarily believes that covered clearing agencies may need to make changes to update their policies and procedures to satisfy the proposed requirements. In these cases, as an example, a covered clearing agency may need to review and amend its existing rule book, policies, and procedures but may not need to develop, design, or implement new operations and practices to satisfy the proposed requirements.

Third, for proposed Rules 17Ad–22(e)(4), (6), (7), (15), (19), and (23), for which no similar existing requirements under Rule 17Ad–22 have been identified,⁴⁴³ the Commission preliminarily believes that covered clearing agencies may need to make more extensive changes to their policies and procedures (or implement new policies and procedures), and may need to take other steps to satisfy the proposed requirements. In these cases,

practices at registered clearing agencies regarding communication procedures and standards and the anticipated economic effect of the proposed rule, respectively).

⁴⁴² In this regard, the Commission notes that its estimates for the initial one-time and ongoing burdens for proposed Rules 17Ad–22(e)(8) through (10) and (12) are the same across each of the proposed rules because the Commission preliminarily believes that the burdens associated with each would primarily constitute a review of the covered clearing agency's policies and procedures to confirm that those policies and procedures satisfy the proposed requirement.

⁴⁴³ In the case of Rule 17Ad–22(e)(23), registered clearing agencies are subject to existing requirements for disclosure under existing Rule 17Ad–22, but new requirements under the proposed rule would impose greater burdens relative to other proposed rules that have similar requirements to those under existing Rule 17Ad–22. See *supra* Part 0 (discussing the requirements under proposed Rule 17Ad–22(e)(23) and their relationship to requirements under existing Rule 17Ad–22(d)(9)).

the PRA burden would be greater since a covered clearing agency may need to, as an example, develop, design, and implement new operations and practices. With respect to these provisions, the PRA burden may be greater since these proposed requirements may not reflect established practices of covered clearing agencies or reflect the normal course of their activities, and the PRA burden for these proposed rules may therefore entail initial one-time burdens to create new written policies and procedures and ongoing burdens, including burdens associated with disclosure requirements.

The Commission requests comment regarding the accuracy of the estimates discussed below.

1. Proposed Rules 17Ad–22(e)(1) Through (3): General Organization

a. Proposed Rule 17Ad–22(e)(1)

Proposed Rule 17Ad–22(e)(1) contains substantially the same requirements as Rule 17Ad–22(d)(1).⁴⁴⁴ As a result, a respondent clearing agency would already have written rules, policies, and procedures substantially similar to the requirements that would be imposed under the proposed rule. The PRA burden imposed by the proposed rules would therefore be minimal and would likely be limited to the review of current policies and procedures and updating existing policies and procedures where appropriate in order to ensure compliance with the proposed rule. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(1),⁴⁴⁵ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 56 hours to review and update existing policies and procedures.⁴⁴⁶

Proposed Rule 17Ad–22(e)(1) would also impose ongoing burdens on a respondent clearing agency. The proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the

⁴⁴⁴ See 17 CFR 240.17Ad–22(d)(1); proposed Rule 17Ad–22(e)(1), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁴⁵ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁴⁶ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Compliance Attorney for 6 hours)) = 8 hours × 7 respondent clearing agencies = 56 hours.

⁴⁴⁰ In the case of proposed Rule 17Ad–22(e)(14), the Commission preliminarily believes that the current practices of covered clearing agencies already largely conform to the proposed requirement, and accordingly believes that covered clearing agencies may need to make only limited changes to update their policies and procedures pursuant to the proposed rule. See *infra* note 508 and accompanying text; see also *infra* Parts 0 and 0 (discussing the current practices at registered clearing agencies regarding segregation and portability and the anticipated economic effect of the proposed rule, respectively).

⁴⁴¹ In the case of proposed Rule 17Ad–22(e)(22), the Commission preliminarily believes that the current practices of covered clearing agencies already largely conform to the proposed requirement, and accordingly believes that covered clearing agencies may need to make only limited changes to update their policies and procedures pursuant to the proposed rule. See *supra* Part 0 (discussing the requirements under the proposed rule) and *infra* Parts 0 and 0 (discussing the current

proposed rule.⁴⁴⁷ Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁴⁸ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(1) would impose an aggregate annual burden on respondent clearing agencies of 21 hours.⁴⁴⁹

b. Proposed Rule 17Ad-22(e)(2)

Proposed Rule 17Ad-22(e)(2) contains some provisions that are similar to Rule 17Ad-22(d)(8), but also adds additional requirements that do not appear in existing Rule 17Ad-22.⁴⁵⁰ As a result, a respondent clearing agency is required to have some written rules, policies, and procedures substantially similar to the requirements that would be imposed under proposed Rule 17Ad-22(e)(2) and would need to establish and implement a limited number of new policies and procedures. The PRA burden imposed by the proposed rule would therefore be associated with reviewing current policies and procedures and updating those policies and procedures or establishing new policies and procedures, where appropriate, in order to ensure compliance with the proposed rule. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad-22(d)(8),⁴⁵¹ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 154 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁴⁵²

Proposed Rule 17Ad-22(e)(2) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require

ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁵³ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(2) would impose an aggregate annual burden on respondent clearing agencies of 28 hours.⁴⁵⁴

c. Proposed Rule 17Ad-22(e)(3)

Proposed Rule 17Ad-22(e)(3) would require a covered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a sound risk management framework.⁴⁵⁵ Under Rule 17Ad-22(d), registered clearing agencies are required to have policies and procedures to manage certain risks faced by these entities,⁴⁵⁶ but the proposed rule would require a comprehensive framework for risk management that would require risk management policies and procedures be designed holistically, be consistent with each other, and work effectively together. Accordingly, the proposed rule may impose a PRA burden that would require respondent clearing agencies to update current policies and procedures in order to develop a more comprehensive framework that would include a periodic review thereof and a plan for orderly recovery and wind-down of the covered clearing agency. As a result, the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 399 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁴⁵⁷

Proposed Rule 17Ad-22(e)(3) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in

response to the proposed rule and activities related to preparing documents facilitating a periodic review of the risk management framework. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁵⁸ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(3) would impose an aggregate annual burden on respondent clearing agencies of 343 hours.⁴⁵⁹ The Commission notes that the estimated ongoing burden for Proposed Rule 17Ad-22(e)(3) is similar to the initial one-time burden because the proposed rule includes a specific requirement that policies and procedures for comprehensive risk management include review on a specified periodic basis and approval by the board of directors annually.

2. Proposed Rules 17Ad-22(e)(4) Through (7): Financial Risk Management

a. Proposed Rule 17Ad-22(e)(4)

The Commission preliminarily believes that the estimated PRA burdens for proposed Rule 17Ad-22(e)(4) would be more significant, as changes to existing policies and procedures would involve more than adjustments and may require a respondent clearing agency to make substantial changes to its policies and procedures.⁴⁶⁰ In addition, proposed Rule 17Ad-22(e)(4) would require one-time systems adjustments related to the capability to test the sufficiency of financial resources and to perform an annual conforming model validation. As a result, the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 1,400 hours.⁴⁶¹

Proposed Rule 17Ad-22(e)(4) would also impose ongoing burdens on a respondent clearing agency. The proposed rule would require ongoing monitoring and compliance activities

⁴⁴⁷ Where the Commission refers to anticipated burdens related to "enforcement activities," the Commission notes that such policies and procedures contemplate enforcement by the respondent clearing agency itself. See Clearing Agency Standards Release, *supra* note 5, at 66246 (stating that "the clearing agency must be able to enforce its policies and procedures that contemplate enforcement by the clearing agency").

⁴⁴⁸ See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

⁴⁴⁹ This figure was calculated as follows: (Compliance Attorney for 3 hours) × 7 respondent clearing agencies = 21 hours.

⁴⁵⁰ See 17 CFR 240.17Ad-22(d)(8); proposed Rule 17Ad-22(e)(2), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁵¹ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁵² This figure was calculated as follows: ((Assistant General Counsel for 24 hours) + (Compliance Attorney for 10 hours)) = 22 hours × 7 respondent clearing agencies = 154 hours.

⁴⁵³ See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

⁴⁵⁴ This figure was calculated as follows: (Compliance Attorney for 4 hours) × 7 respondent clearing agencies = 28 hours.

⁴⁵⁵ See proposed Rule 17Ad-22(e)(3), *infra* Part 0.

⁴⁵⁶ See 17 CFR 240.17Ad-22(d); see also Part 0 (discussing the requirements under the proposed rule and their relationship to existing requirements under Rule 17Ad-22).

⁴⁵⁷ This figure was calculated as follows: ((Assistant General Counsel for 25 hours) + (Compliance Attorney for 18 hours) + (Senior Risk Management Specialist for 7 hours) + (Computer Operations Manager for 7 hours)) = 57 hours × 7 respondent clearing agencies = 399 hours.

⁴⁵⁸ See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

⁴⁵⁹ This figure was calculated as follows: ((Compliance Attorney for 8 hours) + (Administrative Assistant for 3 hours) + (Senior Business Analyst for 5 hours) + (Risk Management Specialist for 33 hours)) = 49 hours × 7 respondent clearing agencies = 343 hours.

⁴⁶⁰ See proposed Rule 17Ad-22(e)(4), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁶¹ This figure was calculated as follows: ((Assistant General Counsel for 60 hours) + (Compliance Attorney for 40 hours) + (Senior Risk Management Specialist for 30 hours) + (Computer Operations Manager for 45 hours) + (Chief Compliance Officer for 15 hours) + (Senior Programmer for 10 hours)) = 200 hours × 7 respondent clearing agencies = 1,400 hours.

with respect to the written policies and procedures created in response to the proposed rule and ongoing activities with respect to testing the sufficiency of financial resources and model validation. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁶² the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(4) would impose an aggregate annual burden on respondent clearing agencies of 420 hours.⁴⁶³

b. Proposed Rule 17Ad-22(e)(5)

Respondent clearing agencies that would be subject to proposed Rule 17Ad-22(e)(5) may already have some written policies and procedures designed to address the collateral risks borne by these entities.⁴⁶⁴ As a result, the Commission preliminarily believes that a respondent clearing agency may need to review and update existing policies and procedures as necessary and may need to adopt new policies and procedures with respect to an annual review of the sufficiency of collateral haircuts and concentration limits. Accordingly, based on the similar policies and procedures requirements in and the Commission's previous corresponding burden estimates for existing Rule 17Ad-22(d)(3),⁴⁶⁵ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 294 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁴⁶⁶

Proposed Rule 17Ad-22(e)(5) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule and

would also result in an annual review of collateral haircuts and concentration limits. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁶⁷ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(5) would impose an aggregate annual burden on respondent clearing agencies of 252 hours.⁴⁶⁸ The Commission notes that the estimated ongoing burden for Proposed Rule 17Ad-22(e)(5) is similar to the initial one-time burden because the proposed rule includes a specific requirement that policies and procedures for collateral include a not-less-than-annual review of the sufficiency of a covered clearing agency's collateral haircuts and concentration limits.

c. Proposed Rule 17Ad-22(e)(6)

The Commission preliminarily believes that the estimated PRA burdens for proposed Rule 17Ad-22(e)(6) would be more significant and may require a respondent clearing agency to make substantial changes to its policies and procedures.⁴⁶⁹ In addition, proposed Rule 17Ad-22(e)(6) would require one-time systems adjustments related to the capability to perform daily backtesting and monthly (or more frequent than monthly) conforming sensitivity analyses. As a result, the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 1,080 hours to review and update existing policies and procedures.⁴⁷⁰

Proposed Rule 17Ad-22(e)(6) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule and activities associated with the daily backtesting and monthly (or more frequent) sensitivity analysis

requirements and annual model validation. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁷¹ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(6) would impose an aggregate annual burden on respondent clearing agencies of 360 hours.⁴⁷²

d. Proposed Rule 17Ad-22(e)(7)

The Commission preliminarily believes that the estimated PRA burdens for proposed Rule 17Ad-22(e)(7) would be more significant and may require a respondent clearing agency to make substantial changes to its policies and procedures.⁴⁷³ In addition, proposed Rule 17Ad-22(e)(7) would require one-time systems adjustments related to the capability to perform an annual conforming model validation, the testing of sufficiency of liquid resources and the testing of access to liquidity providers. As a result, the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 2,310 hours to review and update existing policies and procedures.⁴⁷⁴

Proposed Rule 17Ad-22(e)(7) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule as well as activities related to the testing of sufficiency of liquidity resources and the testing of access to liquidity providers. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁷⁵ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-

⁴⁶² See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

⁴⁶³ This figure was calculated as follows: ((Compliance Attorney for 24 hours) + (Administrative Assistant for 3 hours) + (Senior Business Analyst for 3 hours) + (Risk Management Specialist for 30 hours)) = 60 hours × 7 respondent clearing agencies = 420 hours.

⁴⁶⁴ See 17 CFR 240.17Ad-22(d)(3); proposed Rule 17Ad-22(e)(5), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁶⁵ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁶⁶ This figure was calculated as follows: ((Assistant General Counsel for 16 hours) + (Compliance Attorney for 12 hours) + (Senior Risk Management Specialist for 7 hours) + (Computer Operations Manager for 7 hours)) = 42 hours × 7 respondent clearing agencies = 294 hours.

⁴⁶⁷ See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

⁴⁶⁸ This figure was calculated as follows: ((Compliance Attorney for 6 hours) + (Risk Management Specialist for 30 hours)) = 36 hours × 7 respondent clearing agencies = 252 hours.

⁴⁶⁹ See proposed Rule 17Ad-22(e)(6), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule, including those that do not appear in existing Rule 17Ad-22).

⁴⁷⁰ This figure was calculated as follows: ((Assistant General Counsel for 50 hours) + (Compliance Attorney for 40 hours) + (Senior Risk Management Specialist for 25 hours) + (Computer Operations Manager for 40 hours) + (Chief Compliance Officer for 15 hours) + (Senior Programmer for 10 hours)) = 180 hours × 6 respondent clearing agencies = 1,080 hours.

⁴⁷¹ See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

⁴⁷² This figure was calculated as follows: ((Compliance Attorney for 24 hours) + (Administrative Assistant for 3 hours) + (Senior Business Analyst for 3 hours) + (Risk Management Specialist for 30 hours)) = 60 hours × 6 respondent clearing agencies = 360 hours.

⁴⁷³ See proposed Rule 17Ad-22(e)(7), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁷⁴ This figure was calculated as follows: ((Assistant General Counsel for 95 hours) + (Compliance Attorney for 85 hours) + (Senior Risk Management Specialist for 45 hours) + (Computer Operations Manager for 60 hours) + (Chief Compliance Officer for 30 hours) + (Senior Programmer for 15 hours)) = 330 hours × 7 respondent clearing agencies = 2,310 hours.

⁴⁷⁵ See Clearing Agency Standards Release, *supra* note 5, at 66260-63.

22(e)(7) would impose an aggregate annual burden on respondent clearing agencies of 896 hours.⁴⁷⁶

3. Proposed Rules 17Ad–22(e)(8) Through (10): Settlement

a. Proposed Rule 17Ad–22(e)(8)

Proposed Rule 17Ad–22(e)(8) contains substantially similar provisions to Rule 17Ad–22(d)(12).⁴⁷⁷ As a result, a respondent clearing agency would already have written rules, policies, and procedures substantially similar to the requirements that would be imposed under the proposed rule. In this regard, the Commission preliminarily believes that respondent clearing agencies would incur the incremental burdens of reviewing and updating existing policies and procedures as necessary. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(12),⁴⁷⁸ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 84 hours to review and update existing policies and procedures.⁴⁷⁹

Proposed Rule 17Ad–22(e)(8) would also impose ongoing burdens on a respondent clearing agency. The proposed requirements would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rules. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁴⁸⁰ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(8) would impose an aggregate annual burden on respondent

clearing agencies of approximately 35 hours.⁴⁸¹

b. Proposed Rule 17Ad–22(e)(9)

Proposed Rule 17Ad–22(e)(9) contains substantially similar provisions to Rule 17Ad–22(d)(5).⁴⁸² As a result, a respondent clearing agency would already have written rules, policies, and procedures substantially similar to the requirements that would be imposed under the proposed rule. In this regard, the Commission preliminarily believes that respondent clearing agencies would incur the incremental burdens of reviewing and updating existing policies and procedures as necessary. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(5),⁴⁸³ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 84 hours to review and update existing policies and procedures.⁴⁸⁴

Proposed Rule 17Ad–22(e)(9) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁴⁸⁵ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(9) would impose an aggregate annual burden on respondent clearing agencies of approximately 35 hours.⁴⁸⁶

c. Proposed Rule 17Ad–22(e)(10)

Proposed Rule 17Ad–22(e)(10) contains substantially similar provisions

to Rule 17Ad–22(d)(15).⁴⁸⁷ As a result, a respondent clearing agency would already have written rules, policies, and procedures substantially similar to the requirements that would be imposed under the proposed rule. In this regard, the Commission preliminarily believes that a respondent clearing agency would incur the incremental burdens of reviewing and updating existing policies and procedures as necessary. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(15),⁴⁸⁸ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 84 hours to review and update existing policies and procedures.⁴⁸⁹

Proposed Rule 17Ad–22(e)(10) would also impose ongoing burdens on a respondent clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁴⁹⁰ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(10) would impose an aggregate annual burden on respondent clearing agencies of approximately 35 hours.⁴⁹¹

4. Proposed Rules 17Ad–22(e)(11) Through (12): CSDs and Exchange-of-Value Settlement Systems

a. Proposed Rule 17Ad–22(e)(11)

Proposed Rule 17Ad–22(e)(11) contains similar provisions to Rule 17Ad–22(d)(10).⁴⁹² As a result, a respondent clearing agency providing CSD services would already have written rules, policies, and procedures similar to the requirements that would

⁴⁷⁶ This figure was calculated as follows:

((Compliance Attorney for 48 hours) + (Administrative Assistant for 5 hours) + (Senior Business Analyst for 5 hours) + (Risk Management Specialist for 60 hours) + (Senior Risk Management Specialist for 10 hours)) = 128 hours × 7 respondent clearing agencies = 896 hours.

⁴⁷⁷ See 17 CFR 240.17Ad–22(d)(12); proposed Rule 17Ad–22(e)(8), *infra* Part 0; *see also supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁷⁸ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁷⁹ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Compliance Attorney for 6 hours) + (Senior Business Analyst for 2 hours) + (Computer Operations Manager for 2 hours)) = 12 hours × 7 respondent clearing agencies = 84 hours.

⁴⁸⁰ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁴⁸¹ This figure was calculated as follows:

((Compliance Attorney for 5 hours) × 7 respondent clearing agencies = 35 hours.

⁴⁸² See 17 CFR 240.17Ad–22(d)(5); proposed Rule 17Ad–22(e)(9), *infra* Part 0; *see also supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁸³ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁸⁴ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Compliance Attorney for 6 hours) + (Senior Business Analyst for 2 hours) + (Computer Operations Manager for 2 hours)) = 12 hours × 7 respondent clearing agencies = 84 hours.

⁴⁸⁵ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁴⁸⁶ This figure was calculated as follows: ((Compliance Attorney for 5 hours) × 7 respondent clearing agencies = 35 hours.

⁴⁸⁷ See 17 CFR 240.17Ad–22(d)(15); proposed Rule 17Ad–22(e)(10), *infra* Part 0; *see also supra* Part 0 (discussing the requirements under the proposed rule).

⁴⁸⁸ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁸⁹ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Compliance Attorney for 6 hours) + (Senior Business Analyst for 2 hours) + (Computer Operations Manager for 2 hours)) = 12 hours × 7 respondent clearing agencies = 84 hours.

⁴⁹⁰ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁴⁹¹ This figure was calculated as follows: ((Compliance Attorney for 5 hours) × 7 respondent clearing agencies = 35 hours.

⁴⁹² See 17 CFR 240.17Ad–22(d)(10); proposed Rule 17Ad–22(e)(11), *infra* Part 0.

be imposed under the proposed rule but also imposes additional requirements that do not appear in existing Rule 17Ad-22,⁴⁹³ and accordingly a covered clearing agency providing CSD services may need to update or amend existing policies and procedures, as necessary, to satisfy the proposed requirements and may need to create new policies and procedures. Based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad-22(d)(10),⁴⁹⁴ the Commission preliminarily believes that the respondent clearing agency would incur a one-time burden of approximately 55 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁴⁹⁵

Proposed Rule 17Ad-22(e)(11) would also impose ongoing burdens on the respondent clearing agency providing CSD services. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁴⁹⁶ the Commission preliminarily estimates that the ongoing activities required by proposed Rules 17Ad-22(e)(11) would impose a total annual burden on the respondent clearing agency of approximately 8 hours.⁴⁹⁷

b. Proposed Rule 17Ad-22(e)(12)

Proposed Rule 17Ad-22(e)(12) contains substantially similar provisions to Rule 17Ad-22(d)(13).⁴⁹⁸ As a result, a respondent clearing agency would already have written rules, policies, and procedures substantially similar to the requirements that would be imposed under the proposed rule. In this regard,

⁴⁹³ See *supra* Part 0 (discussing the requirements under the proposed rule and their relationship to existing requirements under Rule 17Ad-22(d)(10)).

⁴⁹⁴ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁴⁹⁵ This figure was calculated as follows: ((Assistant General Counsel for 20 hours) + (Compliance Attorney for 10 hours) + (Intermediate Accountant for 15 hours) + (Senior Business Analyst for 5 hours) + (Computer Operations Manager for 5 hours)) = 55 hours × 1 respondent clearing agency = 55 hours.

⁴⁹⁶ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁴⁹⁷ This figure was calculated as follows: (Compliance Attorney for 8 hours) × 1 respondent clearing agency = 8 hours.

⁴⁹⁸ See 17 CFR 240.17Ad-22(d)(13); proposed Rule 17Ad-22(e)(12), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

the Commission preliminarily believes that a respondent clearing agency would incur the incremental burdens of reviewing and updating existing policies and procedures as necessary. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad-22(d)(13),⁴⁹⁹ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 84 hours to review and update existing policies and procedures.⁵⁰⁰

Proposed Rule 17Ad-22(e)(12) would also impose ongoing burdens on a covered clearing agency. The proposed requirement would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁵⁰¹ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad-22(e)(12) would impose an aggregate annual burden on respondent clearing agencies of approximately 35 hours.⁵⁰²

5. Proposed Rules 17Ad-22(e)(13)

Through (14): Default Management

a. Proposed Rule 17Ad-22(e)(13)

Proposed Rule 17Ad-22(e)(13) would require a respondent clearing agency to have written policies and procedures reasonably designed to address participant default and ensure that the clearing agency can contain losses and liquidity demands and continue to meet its obligations. Proposed Rule 17Ad-22(e)(13) contains similar provisions to Rule 17Ad-22(d)(11) but would also impose additional requirements that do not appear in existing Rule 17Ad-22.⁵⁰³ As a result, the Commission preliminarily believes that a respondent

⁴⁹⁹ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁰⁰ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Compliance Attorney for 6 hours) + (Senior Business Analyst for 2 hours) + (Computer Operations Manager for 2 hours)) = 12 hours × 7 respondent clearing agencies = 84 hours.

⁵⁰¹ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁵⁰² This figure was calculated as follows: (Compliance Attorney for 5 hours) × 7 respondent clearing agencies = 35 hours.

⁵⁰³ See 17 CFR 240.17Ad-22(d)(11); proposed Rule 17Ad-22(e)(13), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule and their relationship to existing Rule 17Ad-22(d)(11)).

clearing agency would incur burdens of reviewing and updating existing policies and procedures in order to comply with the provisions of proposed Rule 17Ad-22(e)(13) and, in some cases, may need to create new policies and procedures. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad-22(d)(11),⁵⁰⁴ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 420 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁵⁰⁵

Proposed Rule 17Ad-22(e)(13) would also impose ongoing burdens on a respondent clearing agency. Specifically, the proposed rule would require annual review and testing of a clearing agency's default policies and procedures. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad-22,⁵⁰⁶ the Commission preliminarily believes that the ongoing activities required by proposed Rule 17Ad-22(e)(13) would impose an aggregate annual burden on respondent clearing agencies of approximately 63 hours.⁵⁰⁷

b. Proposed Rule 17Ad-22(e)(14)

Registered clearing agencies that provide CCP services for security-based swaps generally have written policies and procedures regarding the segregation and portability of customer positions and collateral as a result of applicable regulations but not existing Rule 17Ad-22.⁵⁰⁸ As a result, respondent clearing agencies providing CCP services for security-based swaps would incur burdens of reviewing and updating existing policies and

⁵⁰⁴ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁰⁵ This figure was calculated as follows: ((Assistant General Counsel for 20 hours) + (Compliance Attorney for 16 hours) + (Senior Business Analyst for 12 hours) + (Computer Operations Manager for 12 hours)) = 60 hours × 7 respondent clearing agencies = 420 hours.

⁵⁰⁶ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁵⁰⁷ This figure was calculated as follows: (Compliance Attorney for 9 hours) × 7 respondent clearing agencies = 63 hours.

⁵⁰⁸ See, e.g., 77 FR 6336 (Feb. 7, 2012) (CFTC adopting rules imposing LSOC on DCOs for cleared swaps); see also *supra* Part 0, in particular note 297 and accompanying text. Because the affected clearing agencies are subject to the CFTC's segregation and portability requirements with respect to cleared swaps under LSOC, the Commission preliminarily believes the burden imposed by proposed Rule 17Ad-22(e)(14) would be limited.

procedures as necessary in order to comply with the proposed rule. The Commission preliminarily estimates that Rule 17Ad–22(e)(14) would impose on respondent clearing agencies an aggregate one-time burden of 72 hours to review and update existing policies and procedures.⁵⁰⁹

Proposed Rule 17Ad–22(e)(14) would also impose ongoing burdens on a respondent clearing agency that provides CCP services for security-based swaps. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵¹⁰ the Commission preliminarily believes that the ongoing activities required by proposed Rule 17Ad–22(e)(14) would impose an aggregate annual burden on respondent clearing agencies of approximately 12 hours.⁵¹¹

6. Proposed Rules 17Ad–22(e)(15) Through (17): General Business and Operational Risk Management

a. Proposed Rule 17Ad–22(e)(15)

Respondent clearing agencies would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify and manage general business risks borne by the clearing agency. Policies and procedures governing the identification and mitigation of general business risk are not currently required under existing Rule 17Ad–22 and, as a result, the Commission preliminarily believes that the estimated PRA burdens for proposed Rule 17Ad–22(e)(15) would be more significant and may require a respondent clearing agency to make substantial changes to its policies and procedures.⁵¹² The Commission preliminarily estimates that proposed Rule 17Ad–22(e)(15) would impose an aggregate one-time burden on respondent covered clearing agencies of 1,470 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁵¹³

⁵⁰⁹ This figure was calculated as follows: ((Assistant General Counsel for 12 hours) + (Compliance Attorney for 10 hours) + (Computer Operations Manager for 7 hours) + (Senior Business Analyst for 7 hours)) = 36 hours × 2 respondent clearing agency that provide, or would potentially provide, CCP services with respect to security-based swaps = 72 hours.

⁵¹⁰ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁵¹¹ This figure was calculated as follows: (Compliance Attorney for 6 hours) × 2 respondent clearing agencies = 12 hours

⁵¹² See proposed Rule 17Ad–22(e)(15), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁵¹³ This figure was calculated as follows: ((Assistant General Counsel for 40 hours) +

Proposed Rule 17Ad–22(e)(15) would also impose ongoing burdens on a respondent clearing agency. Proposed Rule 17Ad–22(e)(15) would require a respondent clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain a viable plan, approved by its board of directors and updated at least annually, for raising additional equity in the event that the covered clearing agency's liquid net assets fall below the level required by the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵¹⁴ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(15) would impose an aggregate annual burden on respondent clearing agencies of 336 hours.⁵¹⁵

b. Proposed Rule 17Ad–22(e)(16)

A registered clearing agency is currently required to have written policies and procedures reasonably designed to address, in large part, the safeguarding of assets of its assets and those of its participants under Rule 17Ad–22(d)(3).⁵¹⁶ Proposed Rule 17Ad–22(e)(16) contains substantially similar provisions. As a result, the Commission preliminarily believes that a respondent clearing agency would be required to conduct a review of current policies and procedures and update these existing policies and procedures where appropriate in order to ensure compliance with the proposed rule and that the PRA burden imposed by the proposed rule would be limited. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(3),⁵¹⁷ the Commission preliminarily estimates that all respondent clearing agencies would incur an aggregate one-time burden of approximately 140 hours to review and

(Compliance Attorney for 30 hours) + (Computer Operations Manager for 10 hours) + (Senior Business Analyst for 10 hours) + (Financial Analyst for 70 hours) + (Chief Financial Officer for 50 hours)) = 210 hours × 7 respondent clearing agencies = 1,470 hours.

⁵¹⁴ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁵¹⁵ This figure was calculated as follows: ((Compliance Attorney for 42 hours) + (Administrative Assistant for 3 hours) + (Senior Business Analyst for 3 hours)) = 48 hours × 7 respondents clearing agencies = 336 hours.

⁵¹⁶ See 17 CFR 240.17Ad–22(d)(3); proposed Rule 17Ad–22(e)(16), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁵¹⁷ See Clearing Agency Standards Release, *supra* note 5, at 66260.

update existing policies and procedures.⁵¹⁸

Proposed Rule 17Ad–22(e)(16) would also impose ongoing burdens on a respondent clearing agency. It would require ongoing monitoring and compliance activities with respect to the policies and procedures implemented in response to the requirements of the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵¹⁹ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(16) would impose an aggregate annual burden on respondent clearing agencies of 42 hours.⁵²⁰

c. Proposed Rule 17Ad–22(e)(17)

Proposed Rule 17Ad–22(e)(17) contains similar requirements to those under Rule 17Ad–22(d)(4) but would also impose additional requirements that do not appear in existing Rule 17Ad–22.⁵²¹ As a result, a respondent clearing agency is currently required to have some written rules, policies and procedures containing provisions similar to the requirements that would be imposed under the proposed rule, but it would also need to review and update existing policies and procedures, where necessary, and may need to create policies and procedures to address the additional requirements. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(4),⁵²² the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 196 hours to review and update existing policies and procedures and to create new policies and procedures, as necessary.⁵²³

⁵¹⁸ This figure was calculated as follows: ((Assistant General Counsel for 4 hours) + (Compliance Attorney for 8 hours) + (Senior Business Analyst for 4 hours) + (Computer Operations Manager for 4 hours)) = 20 hours × 7 respondent clearing agencies = 140 hours.

⁵¹⁹ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁵²⁰ This figure was calculated as follows: (Compliance Attorney for 6 hours) × 7 respondent clearing agencies = 42 hours.

⁵²¹ See 17 CFR 240.17Ad–22(d)(4); proposed Rule 17Ad–22(e)(17), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁵²² See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵²³ This figure was calculated as follows: ((Assistant General Counsel for 4 hours) + (Compliance Attorney for 8 hours) + (Computer Operations Manager for 6 hours) + (Senior Business Analyst for 4 hours) + (Chief Compliance Officer for

Proposed Rule 17Ad–22(e)(17) would also impose ongoing burdens on a respondent clearing agency. Specifically, the proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵²⁴ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(17) would impose an aggregate annual burden on respondent clearing agencies of 112 hours.⁵²⁵

7. Proposed Rules 17Ad–22(e)(18) Through (20): Access

a. Proposed Rule 17Ad–22(e)(18)

Proposed Rule 17Ad–22(e)(18) contains similar requirements to those in existing Rules 17Ad–22(b)(5) through (7) and (d)(2).⁵²⁶ As a result, a respondent clearing agency is currently required to have written rules, policies, and procedures containing provisions similar to the requirements that would be imposed under the proposed rule. Thus, for certain portions of proposed Rule 17Ad–22(e)(18), the Commission preliminarily believes that a respondent clearing agency would need to review and update existing policies and procedures where necessary. Because proposed Rule 17Ad–22(e)(18) also imposes additional requirements that do not appear in existing Rule 17Ad–22, however,⁵²⁷ a respondent clearing agency may be required to create policies and procedures to address these additional requirements. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rules 17Ad–22(b)(5) through (7) and (d)(2),⁵²⁸ the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 308 hours to review and update existing policies and procedures

4 hours) + (Senior Programmer for 2 hours)) = 28 hours × 7 respondent clearing agency = 196 hours.

⁵²⁴ See Clearing Agency Standards Release, *supra* note 5, at 66260–63.

⁵²⁵ This figure was calculated as follows: (Compliance Attorney for 6 hours) × 7 respondent clearing agencies = 42 hours.

⁵²⁶ See 17 CFR 240.17Ad–22(b)(5) through (7) and (d)(2).

⁵²⁷ See proposed Rule 17Ad–22(e)(18), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁵²⁸ See Clearing Agency Standards Release, *supra* note 5, at 66260.

and to create new policies and procedures, as necessary.⁵²⁹

Proposed Rule 17Ad–22(e)(18) would also impose ongoing burdens on a respondent clearing agency. Specifically, the proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵³⁰ the Commission preliminarily estimates that the ongoing activities required by the proposed rule would impose an aggregate annual burden on respondent clearing agencies of 49 hours.⁵³¹

b. Proposed Rule 17Ad–22(e)(19)

Respondent clearing agencies would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to address material risks associated from tiered participation arrangements as required by proposed Rule 17Ad–22(e)(19). Tiered participation arrangements are not addressed in existing Rule 17Ad–22. To the extent that a respondent clearing agency has not addressed tiered participation arrangements in its policies and procedures, the Commission preliminarily believes that the respondent clearing agency would need to create policies and procedures to address these proposed requirements. In this regard, the PRA burden for proposed Rule 17Ad–22(e)(19) would impose one-time initial burdens to create policies and procedures. The Commission preliminarily estimates that proposed Rule 17Ad–22(e)(19) would impose an aggregate one-time burden on respondent clearing agencies of 308 hours to create said policies and procedures.⁵³²

Proposed Rule 17Ad–22(e)(19) would also impose ongoing burdens on a

⁵²⁹ This figure was calculated as follows: ((Assistant General Counsel for 10 hours) + (Compliance Attorney for 7 hours) + Computer Operations Manager for 15 hours) + (Senior Business Analyst for 5 hours) + (Chief Compliance Officer for 5 hours) + (Senior Programmer for 2 hours)) = 44 hours × 7 respondent clearing agencies = 308 hours.

⁵³⁰ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵³¹ This figure was calculated as follows: (Compliance Attorney for 7 hours) × 7 respondent clearing agencies = 49 hours.

⁵³² This figure was calculated as follows: ((Assistant General Counsel for 10 hours) + (Compliance Attorney for 7 hours) + (Computer Operations Manager for 15 hours) + (Senior Business Analyst for 5 hours) + (Chief Compliance Officer for 5 hours) + (Senior Programmer for 2 hours)) = 44 hours × 7 respondent clearing agencies = 308 hours.

respondent clearing agency. Specifically, the proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵³³ the Commission preliminarily estimates that the ongoing activities required by the proposed rule would impose an annual aggregate burden on respondent clearing agencies of 49 hours.⁵³⁴

c. Proposed Rule 17Ad–22(e)(20)

Registered clearing agencies are currently required to have written policies and procedures reasonably designed to manage risks related to links between the clearing agency and others under Rule 17Ad–22(d)(7). Proposed Rule 17Ad–22(e)(20) contains similar requirements, but also imposes additional requirements.⁵³⁵ As a result, a respondent clearing agency may need to review and update existing policies and procedures or establish new policies and procedures, as necessary, to satisfy the proposed requirement. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(7),⁵³⁶ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 308 hours to review and update existing policies and procedures.⁵³⁷

Proposed Rule 17Ad–22(e)(20) would also impose ongoing burdens on a respondent clearing agency. Specifically, the proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance

⁵³³ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵³⁴ This figure was calculated as follows: (Compliance Attorney for 7 hours) × 7 respondent clearing agencies = 49 hours.

⁵³⁵ See 17 CFR 240.17 Ad–22(d)(7); proposed Rule 17Ad–22(e)(20), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁵³⁶ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵³⁷ This figure was calculated as follows: ((Assistant General Counsel for 10 hours) + (Compliance Attorney for 7 hours) + (Senior Business Analyst for 5 hours) + (Computer Operations Manager for 15 hours) + (Chief Compliance Officer for 5 hours) + (Senior Programmer for 2 hours)) = 44 hours × 7 respondent clearing agencies = 308 hours.

burdens with respect to existing Rule 17Ad–22,⁵³⁸ the Commission preliminarily estimates that the ongoing activities required by the proposed rule would impose an aggregate annual burden on respondent clearing agencies of 49 hours.⁵³⁹

8. Proposed Rules 17Ad–22(e)(21) Through (22): Efficiency

a. Proposed Rule 17Ad–22(e)(21)

Registered clearing agencies are currently required to have written policies and procedures requiring the clearing agency to be cost effective with respect to meeting the requirements of its participants and the markets it serves under Rule 17Ad–22(d)(6), and proposed Rule 17Ad–22(e)(21) contains similar requirements but also imposes new requirements.⁵⁴⁰ As a result, a respondent clearing agency would likely incur the burdens of reviewing and updating existing policies and procedures and may need to create new policies and procedures to satisfy the proposed rule, as necessary. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(6),⁵⁴¹ the Commission preliminarily estimates that that respondent clearing agencies would incur an aggregate one-time burden of approximately 224 hours to review and update existing policies and procedures.⁵⁴²

Proposed Rule 17Ad–22(e)(21) would also impose ongoing burdens on a respondent clearing agency. The proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures required under the proposed rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵⁴³ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(21) would impose an aggregate

annual burden on respondent clearing agencies of 77 hours.⁵⁴⁴

b. Proposed Rule 17Ad–22(e)(22)

Respondent clearing agencies would be required to establish, implement, maintain and enforce written policies and procedures reasonably designed to implement the requirements of proposed Rule 17Ad–22(e)(22) with respect to the use of relevant internationally accepted communication procedures and standards. Although registered clearing agencies are not subject to an existing similar requirement under Rule 17Ad–22, the Commission understands that covered clearing agencies currently use the relevant internationally accepted communication procedures and standards and expects a covered clearing agency would need to make only limited changes to satisfy the requirements under the proposed rule.⁵⁴⁵ Accordingly, the Commission preliminarily estimates that proposed Rule 17Ad–22(e)(22) would impose an aggregate one-time burden on respondent clearing agencies of 168 hours to review and update existing policies and procedures.⁵⁴⁶

Proposed Rule 17Ad–22(e)(22) would also impose ongoing burdens on a respondent clearing agency. Specifically, the proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵⁴⁷ the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(22) would impose an aggregate annual burden on respondent clearing agencies of 35 hours.⁵⁴⁸

9. Proposed Rule 17Ad–22(e)(23): Disclosure

Proposed Rule 17Ad–22(e)(23) contains similar requirements to Rule

17Ad–22(d)(9) but also imposes substantial new requirements.⁵⁴⁹ As a result, although a respondent clearing agency is already required to have written rules, policies and procedures containing provisions similar to some of the requirements in the proposed rule, for some provisions of proposed Rule 17Ad–22(e)(23), a respondent clearing agency would be required to establish policies and procedures to address the additional requirements. Accordingly, based on the similar policies and procedures requirements and the corresponding burden estimates previously made by the Commission for Rule 17Ad–22(d)(9),⁵⁵⁰ the Commission preliminarily estimates that respondent clearing agencies would incur an aggregate one-time burden of 966 hours to review and update existing policies and procedures and to create policies and procedures, as necessary.⁵⁵¹

Proposed Rule 17Ad–22(e)(23) would also impose ongoing burdens on a respondent clearing agency. Specifically, the proposed rule would require ongoing monitoring and compliance activities with respect to the written policies and procedures created in response to the rule. Based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵⁵² the Commission preliminarily estimates that the ongoing activities required by proposed Rule 17Ad–22(e)(23) would impose an aggregate annual burden on respondent clearing agencies of 238 hours.⁵⁵³

10. Total Burden for Proposed Rule 17Ad–22(e)

The aggregate initial burden for respondent clearing agencies under proposed Rule 17Ad–22(e) would be 10,664 hours. The aggregate ongoing burden for respondent clearing agencies under proposed Rule 17Ad–22(e) would be 3,460 hours.

⁵³⁸ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵³⁹ This figure was calculated as follows: (Compliance Attorney for 7 hours) × 7 respondent clearing agencies = 49 hours.

⁵⁴⁰ See 17 CFR 240.17Ad–22(d)(6).

⁵⁴¹ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁴² This figure was calculated as follows: ((Assistant General Counsel for 10 hours) + (Compliance Attorney for 7 hours) + (Senior Business Analyst for 5 hours) + (Computer Operations Manager for 10 hours)) = 32 hours × 7 respondent clearing agencies = 224 hours.

⁵⁴³ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁴⁴ This figure was calculated as follows:

((Compliance Attorney for 5 hours) + (Administrative Assistant for 3 hours) + (Senior Business Analyst for 3 hours)) = 11 hours × 7 respondent clearing agencies = 77 hours.

⁵⁴⁵ See *supra* note 441.

⁵⁴⁶ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Compliance Attorney for 6 hours) + (Computer Operations Manager for 7 hours) + (Senior Business Analyst for 2 hours) + (Chief Compliance Officer for 5 hours) + (Senior Programmer for 2 hours)) = 24 hours × 7 respondent clearing agencies = 168 hours.

⁵⁴⁷ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁴⁸ This figure was calculated as follows: (Compliance Attorney for 5 hours) × 7 respondent clearing agencies = 35 hours.

⁵⁴⁹ See 17 CFR 240.17Ad–22(d)(9); proposed Rule 17Ad–22(e)(23), *infra* Part 0; see also *supra* Part 0 (discussing the requirements under the proposed rule).

⁵⁵⁰ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁵¹ This figure was calculated as follows: ((Assistant General Counsel for 38 hours) + (Compliance Attorney for 24 hours) + (Computer Operations Manager for 32 hours) + (Senior Business Analyst for 18 hours) + (Chief Compliance Officer for 18 hours) + (Senior Programmer for 8 hours)) = 138 hours × 7 respondent clearing agencies = 966 hours.

⁵⁵² See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁵³ This figure was calculated as follows: (Compliance Attorney for 34 hours) × 7 respondent clearing agencies = 238 hours.

E. Total Annual Reporting and Recordkeeping Burden for Proposed Rule 17Ab2–2

Proposed Rule 17Ab2–2 would govern Commission determinations as to whether a registered clearing agency is a covered clearing agency and whether a covered clearing agency is either involved in activities with a more complex risk profile or systemically important in multiple jurisdictions.⁵⁵⁴ Because such determinations may be made upon request of a clearing agency or its members, the respondents would have the burdens of preparing such requests for submission to the Commission. The Commission preliminarily notes that, to the extent such determinations are carried out by the Commission on its own initiative pursuant to proposed Rule 17Ab2–2, the PRA burdens on the respondents would be limited. Accordingly, based on the Commission's previous estimates for ongoing monitoring and compliance burdens with respect to existing Rule 17Ad–22,⁵⁵⁵ the Commission preliminarily believes that respondent clearing agencies would incur an aggregate one-time burden of approximately 24 hours to draft and review a determination request to the Commission.⁵⁵⁶

F. Collection of Information Is Mandatory

The collection of information relating to proposed Rules 17Ad–22(e)(1) through (3), 17Ad–22(e)(4)(ii) through (v), 17Ad–22(e)(7)(i) through (ix), and 17Ad–22(e)(8) through (23) would be mandatory for all respondent clearing agencies. The collection of information requirement relating to proposed Rule 17Ad–22(e)(4)(i) and 17Ad–22(e)(7)(x) would be mandatory for a respondent clearing agency that provides CCP services and that is designated by the Commission either as systemically important in multiple jurisdictions or as a complex risk profile clearing agency. The collection of information requirement relating to proposed Rule 17Ad–22(e)(6) would be mandatory for a respondent clearing agency that provides CCP services.

⁵⁵⁴ See *infra* Part 0 (further discussing the purpose, scope, and application of proposed Rule 17Ab2–2) and Part 0 (proposed text of Rule 17Ab2–2).

⁵⁵⁵ See Clearing Agency Standards Release, *supra* note 5, at 66260.

⁵⁵⁶ This figure was calculated as follows: ((Assistant General Counsel for 2 hours) + (Staff Attorney for 4 hours) + (Outside Counsel for 6 hours)) = 12 hours × 2 respondent clearing agencies = 24 hours.

The collection of information requirement relating to proposed Rule 17Ab2–2 is voluntary.

G. Confidentiality

The Commission preliminarily expects that the written policies and procedures generated pursuant to proposed Rule 17Ad–22(e) would be communicated to the members, subscribers, and employees (as applicable) of all entities covered by the proposed rule and the public (as applicable). To the extent that this information is made available to the Commission, it would not be kept confidential. Such policies and procedures would be required to be preserved in accordance with, and for periods specified in, Exchange Act Rules 17a–1⁵⁵⁷ and 17a–4(e)(7).⁵⁵⁸ To the extent that the Commission receives confidential information pursuant to this collection of information, such information would be kept confidential subject to the provisions of applicable law.⁵⁵⁹

To the extent that the Commission receives confidential information pursuant to the collection of information under proposed Rule 17Ab2–2, the Commission preliminarily expects such information would be kept confidential subject to the provisions of applicable law.⁵⁶⁰

H. Request for Comments

The Commission invites comments on all of the above estimates. Pursuant to 44 U.S.C. 3506(c)(2)(B), the Commission requests comment in order to (a) evaluate whether the collection of information is necessary for the proper performance of our functions, including whether the information will have practical utility; (b) evaluate the accuracy of our estimates of the burden of the collection of information; (c) determine whether there are ways to enhance the quality, utility, and clarity of the information to be collected; (d) evaluate whether there are ways to minimize the burden of the collection of information on those who respond, including through the use of automated

⁵⁵⁷ 17 CFR 240.17a–1.

⁵⁵⁸ 17 CFR 240.17a–4(e)(7).

⁵⁵⁹ See, e.g., 5 U.S.C. 552. Exemption 4 of the Freedom of Information Act provides an exemption for trade secrets and commercial or financial information obtained from a person and privileged or confidential. See 5 U.S.C. 552(b)(4). Exemption 8 of the Freedom of Information Act provides an exemption for matters that are contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions. See 5 U.S.C. 552(b)(8).

⁵⁶⁰ See *id.*

collection techniques or other forms of information technology; and (e) determine whether there are cost savings associated with the collection of information that have not been identified in this proposal.

Persons submitting comments on the collection of information requirements should direct them to the Office of Management and Budget, Attention: Desk Officer for the Securities and Exchange Commission, Office of Information and Regulatory Affairs, Washington, DC 20503, and should also send a copy of their comments to Kevin M. O'Neill, Deputy Secretary, Securities and Exchange Commission, 100 F Street NE., Washington, DC 20549–1090, with reference to File No. S7–03–14. Requests for materials submitted to OMB by the Commission with regard to this collection of information should be in writing, with reference to File No. S7–03–14, and be submitted to the Securities and Exchange Commission, Office of Investor Education and Advocacy, 100 F Street NE., Washington, DC 20549–0213. As OMB is required to make a decision concerning the collections of information between 30 and 60 days after publication, a comment to OMB is best assured of having its full effect if OMB receives it by April 25, 2014.

IV. Economic Analysis

A. Introduction

The purpose of the proposed amendments to Rule 17Ad–22 and of proposed Rule 17Ab2–2 is to establish requirements for the operation and governance of registered clearing agencies that meet the definition of a “covered clearing agency.” Registered clearing agencies have become an essential part of the infrastructure of the U.S. securities markets. Many securities transactions are centrally cleared and settled, and central clearing and settlement is becoming more prevalent in the security-based swap markets. For example, DTCC reported processing \$1.6 quadrillion in transactions in 2012.⁵⁶¹ For the same period, Intercontinental Exchange, Inc. reported \$10.2 trillion in gross notional CDS cleared and settled.⁵⁶² While clearing

⁵⁶¹ See DTCC, 2012 Annual Report, available at <http://www.dtcc.com/about/annual-report.aspx>.

⁵⁶² See Intercontinental Exchange, Inc., 2012 Annual Report, at 66, available at https://materials.proxyvote.com/Approved/45865V/20130319/AR_159922/. Intercontinental Exchange, Inc. is the parent company of ICE and ICEEU.

ICE began clearing corporate single-name CDS in December 2009, and as of February 1, 2013, had cleared \$1.9 trillion gross notional of single-name CDS on 153 North American corporate reference

agencies generally benefit the markets they serve, such entities can pose substantial risk to the financial system as a whole, due in part to the fact that clearing agencies concentrate risk. Disruption to a clearing agency's operations, or failure on the part of a clearing agency to meet its obligations, could serve as a potential source of contagion, resulting in significant costs not only to the clearing agency and its members but also the broader economy and market participants.⁵⁶³ As a result, proper management of the risks associated with central clearing and settlement is necessary to ensure the stability of U.S. securities markets.

The mandated central clearing and settlement of security-based swaps wherever possible and appropriate, a core component of Title VII, reinforces this need.⁵⁶⁴ Where a clearing agency provides CCP services, clearing and

settlement of security-based swap contracts replaces bilateral counterparty exposures with exposures against the clearing agency providing CCP services. Consequently, a move from voluntary central clearing and settlement of security-based swap contracts to mandatory clearing of security-based swap contracts, holding the volume of security-based swap transactions constant, will increase economic exposures against CCPs that clear security-based swaps. Increased exposures in turn raise the possibility that these CCPs may serve as a transmission mechanism for systemic events.

Clearing agencies have several incentives to implement comprehensive risk management programs. First, the ongoing viability of a clearing agency depends on its reputation and the confidence that market participants have in its services. Clearing agencies therefore have an incentive to minimize the likelihood that a member default or operational outage would disrupt settlement. Second, some clearing agencies, including those that mutualize default risks, contribute a portion of their own capital as part of their contingent resources. Clearing agencies with such capital contributions to their contingent resources thus have an economic interest in sound risk management. Registered clearing agencies are SROs that enforce applicable rules and requirements under Commission oversight and are also in certain instances subject to CFTC oversight.⁵⁶⁵ Registered clearing agencies consequently also face a legal requirement that their rules be designed to protect the public interest in the process of clearing securities or derivatives.⁵⁶⁶

Nevertheless, clearing agencies' incentives for sound risk management may be tempered by pressures to reduce costs and maximize profits that are distinct from the public interest goals set forth in governing statutes, such as financial stability, and may result in clearing agencies choosing tradeoffs between the costs and benefits of risk management that are not socially efficient. Because the current market for clearing services is characterized by high barriers to entry and limited competition,⁵⁶⁷ the market power exercised by clearing agencies in the

markets they serve may blunt incentives to invest in risk management systems.⁵⁶⁸ Further, even if clearing agencies do internalize costs that they impose on their clearing members, they may fail to internalize the consequences of their risk management decisions on other financial entities that are connected to them through relationships with clearing members.⁵⁶⁹ Such a failure represents a financial network externality imposed by clearing agencies on the broader financial markets and suggests that financial stability, as a public good, may be under-produced in equilibrium.

As discussed in more detail below, the proposed amendments to Rule 17Ad-22 represent a strengthening of the Commission's regulation of registered clearing agencies. The Commission preliminarily believes that the more specific requirements imposed by the proposed amendments will further mitigate potential moral hazard associated with risk management at covered clearing agencies. For instance, in the absence of policies and procedures that require periodic stress-testing and validation of credit and liquidity risk models, clearing agencies could potentially choose to recalibrate models in periods of low volatility and avoid recalibration in periods of high volatility, causing them to underestimate the risks they face.

The Commission also preliminarily believes that the additional specificity of proposed Rule 17Ad-22(e), along with proposed testing requirements, would be more effective at mitigating these particular manifestations of incentive misalignments than existing Rule 17Ad-22. The Commission preliminarily believes, as a result, that a general benefit of the proposed amendments would be reductions in the likelihood of CCP failure that result from improved safeguards. This general benefit would be realized to the extent that clearing agencies do not already conform to new requirements under the proposed amendments. Despite the potential incentive problems noted above and perhaps in anticipation of regulatory efforts, some registered clearing agencies have taken steps to update their policies and procedures in accordance with the standards contained in the proposed rules. The Commission notes that in some instances the proposed rules establish as a minimum regulatory requirement

entities. See Exchange Act Release No. 34-61662 (Mar. 5, 2010), 75 FR 11589, 11591 (Mar. 11, 2010) (discussing ICE's credit default swap clearing activities as of March 2010); ICE, Volume of ICE CDS Clearing, available at https://www.theice.com/clear_credit.jhtml.

ICEEU began clearing CDS on single-name corporate reference entities in December 2009, and, as of February 1, 2013, had cleared €1.6 trillion in gross notional of single-name CDS on 121 European corporate reference entities. See Exchange Act Release No. 61973 (Apr. 23, 2010), 75 FR 22656, 22657 (Apr. 29, 2010) (discussing ICEEU's credit default swap clearing activity as of April 2010); ICEEU, Volume of ICE CDS Clearing, available at https://www.theice.com/clear_credit.jhtml.

⁵⁶³ See generally Darrell Duffie, Ada Li & Theo Lubke, Policy Perspectives on OTC Derivatives Market Infrastructure, at 9 (Fed. Reserve Bank N.Y. Staff Reps., Mar. 2010), available at http://www.newyorkfed.org/research/staff_reports/sr424.pdf ("If a CCP is successful in clearing a large quantity of derivatives trades, the CCP is itself a systemically important financial institution. The failure of a CCP could suddenly expose many major market participants to losses. Any such failure, moreover, is likely to have been triggered by the failure of one or more large clearing members, and therefore to occur during a period of extreme market fragility."); Pirrong, The Inefficiency of Clearing Mandates, Policy Analysis, No. 655, at 11-14, 16-17, 24-26 (2010), available at <http://www.cato.org/pubs/pas/PA665.pdf>, at 11-14, 16-17, 24-26 (stating, among other things, that "CCPs are concentrated points of potential failure that can create their own systemic risks," that "[a]t most, creation of CCPs changes the topology of the network of connections among firms, but it does not eliminate these connections," that clearing may lead speculators and hedgers to take larger positions, that a CCP's failure to effectively price counterparty risks may lead to moral hazard and adverse selection problems, that the main effect of clearing would be to "redistribute losses consequent to a bankruptcy or run," and that clearinghouses have failed or come close to failing in the past, including in connection with the 1987 market break); Manmohan Singh, Making OTC Derivatives Safe—A Fresh Look, at 5-11 (IMF Working Paper, Mar. 2011), available at <http://www.imf.org/external/pubs/ft/wp/2011/wp1166.pdf> (addressing factors that could lead central counterparties to be "risk nodes" that may threaten systemic disruption).

⁵⁶⁴ See *supra* Part 0.

⁵⁶⁵ See *supra* Part 0 and note 96 (describing the Commission's framework for regulation of SROs and the SRO rule filing process); see also *supra* note 53 (describing regulations adopted by the CFTC for DCOs).

⁵⁶⁶ See 15 U.S.C. 78q-1(b)(3)(F).

⁵⁶⁷ See Clearing Agency Standards Release, *supra* note 5, at 66263.

⁵⁶⁸ See *infra* Part 0.

⁵⁶⁹ See Daron Acemoglu, Asuman Ozdaglar & Alireza Tahbaz-Salehi, Systemic Risk and Stability in Financial Networks (NBER Working Paper No. 18727, Jan. 2013), available at <http://www.nber.org/papers/w18727>.

certain current practices at some registered clearing agencies. In these cases, the Commission preliminarily believes that imposing the proposed requirements on covered clearing agencies will have the effect of imposing consistent, higher minimum risk management standards across covered clearing agencies.

In analyzing the economic consequences and effects of the rules proposed in this release, the Commission has been guided by the objectives of Section 17A of the Exchange Act to have due regard for the public interest, the protection of investors, the safeguarding of securities and funds, the maintenance of fair competition, and to otherwise further the purposes of the Exchange Act through the registration and regulation of clearing agencies.⁵⁷⁰ It has also been guided by the objectives of the Dodd-Frank Act to mitigate risks to the U.S. financial system, promote counterparty protection, increase market transparency for OTC derivatives, and facilitate financial stability.⁵⁷¹ The Commission has also taken into account the importance of maintaining a well-functioning security-based swap market and the objectives of the Clearing Supervision Act to establish an enhanced supervisory and risk control system for systemically important clearing agencies and other FMUs.⁵⁷² In addition, as directed by the Clearing Supervision Act, the Commission makes this proposal after giving careful consideration to the standards set forth in the PFMI Report as the relevant international standard. Proposing rules that maintain consistency with the standards set forth in the PFMI Report may reduce the likelihood that market participants, including members of covered clearing agencies, would restructure in an effort to operate in less-regulated markets.

The Commission preliminarily believes that the proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2 are consistent with the goals of Section 17A of the Exchange Act, to promote the prompt and accurate clearing and settlement of transactions in securities, of the Clearing

Supervision Act, to enhance the supervision and oversight of clearing entities, and of Title VII, to create a robust regulatory structure for security-based swaps. In proposing these rules, the Commission is also mindful of the benefits that would accrue through maintaining consistency with regulations adopted by the Board and the CFTC.

The Commission is sensitive to the economic consequences and effects of the proposed rules, including their benefits and costs. In proposing these rules, the Commission has been mindful of the economic consequences of the decisions it makes regarding the scope of applying the proposed rules to covered clearing agencies. Moreover, the Commission acknowledges that, since many of the proposed rules require a covered clearing agency to adopt new policies and procedures, the economic effects and consequences of the proposed rules include those flowing from the substantive results of those new policies and procedures. Under Section 3(f) of the Exchange Act, whenever the Commission engages in rulemaking under the Exchange Act and is required to consider or determine whether an action is necessary or appropriate in the public interest, it must consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation.⁵⁷³ Further, as noted above, Section 17A of the Exchange Act directs the Commission to have due regard for the public interest, the protection of investors, the safeguarding of securities and funds, and maintenance of fair competition among brokers and dealers, clearing agencies, and transfer agents when using its authority to facilitate the establishment of a national system for clearance and settlement transactions in securities.⁵⁷⁴ In addition, Section 23(a)(2) of the Exchange Act requires the Commission, when making rules under the Exchange Act, to consider the impact such rules would have on competition.⁵⁷⁵ Section 23(a)(2) also prohibits the Commission from adopting any rule that would impose a burden on competition not necessary or appropriate in furtherance of the purposes of the Exchange Act.⁵⁷⁶

The Commission has attempted, where possible, to quantify the benefits and costs anticipated to flow from the proposed rules. In some cases, as

indicated below, data to quantify the benefits and costs associated with the proposed rules are unavailable. For example, implementing policies and procedures that require stress testing of financial resources available to a covered clearing agency at least once each day may require additional investment in infrastructure, but the particular infrastructure requirements will depend on existing systems and a covered clearing agency's choice of modeling techniques. In other cases, quantification depends heavily on factors outside the control of the Commission, particularly with regard to the number of potential new entrants affected by the proposed rules that in the future may be designated systemically important by the FSOC.

Overall, the Commission preliminarily believes that the proposed rules represent improvements in risk management, be it systemic, legal, credit, liquidity, general business, custody, investment, or operational risk, in keeping with the requirements of Section 17A of the Exchange Act and the Dodd-Frank Act. The Commission preliminarily believes that the proposed rules will result in an increase in financial stability insofar as they result in minimum standards at covered clearing agencies that are higher than those standards implied by current practices at covered clearing agencies. In particular cases, such as new requirements related to management of liquidity risk and general business risk, stability may arise as a result of higher risk management standards at covered clearing agencies that effectively lower the probability that either covered clearing agencies or their members default. As explained in Part IV.C.2, reduced default probabilities for covered clearing agencies may, in turn, improve efficiency and capital formation.

Request for Comments. The Commission requests comment on all aspects of the economic analysis of the proposed rules, including their benefits and costs, as well as any effect these proposed rules may have on competition, efficiency, and capital formation. Acknowledging the data limitations noted above, the Commission encourages commenters to provide data and analysis to help further quantify or estimate the potential benefits and costs of the proposed rules.

B. Economic Baseline

1. Overview

To assess the economic effects of the proposed rules, including possible

⁵⁷⁰ See *supra* note 2 and accompanying text (noting the requirements of Section 17A of the Exchange Act).

⁵⁷¹ See *supra* note 13 and accompanying text (noting the purpose of the Dodd-Frank Act to, among other things, promote financial stability); *supra* note 14 and accompanying text (noting the purpose of the Dodd-Frank Act to, among other things, create a regulatory framework for the OTC derivatives markets).

⁵⁷² See *supra* Part 0 (describing the regulatory framework for FMUs set forth in the Clearing Supervision Act).

⁵⁷³ See 15 U.S.C. 78c(f).

⁵⁷⁴ See *supra* note 2 and accompanying text (noting the requirements of Section 17A).

⁵⁷⁵ See 15 U.S.C. 78w(a)(2).

⁵⁷⁶ See *id.*

effects on efficiency, competition, and capital formation, the Commission is using a baseline composed of (1) the current regulatory framework under which registered clearing agencies operate,⁵⁷⁷ and (2) the current practices of registered clearing agencies as they relate to the rules being proposed today.

More specifically, the baseline includes existing legal requirements applicable to registered clearing agencies providing CCP or CSD services as they exist at the time of this proposal, including applicable rules adopted by the Commission. Rule 17Ad-22 established a regulatory framework for registered clearing agencies, including security-based swap clearing agencies deemed registered pursuant to the Dodd-Frank Act.⁵⁷⁸ Section 17A of the Exchange Act generally regulates the national system for clearance and settlement, while Section 19 of the Exchange Act describes the registration, responsibilities, and oversight of SROs. Further, clearing agencies are subject to new requirements related to security-based swaps under the Dodd-Frank Act.

In terms of current practice, registered clearing agencies are required to operate in compliance with the requirements set forth in Rule 17Ad-22, though they may vary in the particular ways they meet these requirements. Some variation in practices across clearing agencies derives from the products they clear and the markets they serve. Additionally, the Commission understands that certain registered clearing agencies have already adopted practices consistent with several of the standards set forth in the PFMI Report. Accordingly, because proposed Rule 17Ad-22(e) and proposed Rule 17Ab2-2 result in general consistency with the standards set forth in the PFMI Report, the Commission preliminarily believes the resulting benefits and costs to covered clearing agencies would, in some cases, be incremental because of the relationship between existing requirements applicable to registered clearing agencies,⁵⁷⁹ the anticipation of new requirements consistent with the standards set forth in the PFMI Report,⁵⁸⁰ and the CPSS-IOSCO Recommendations that preceded the PFMI Report.⁵⁸¹ In certain other cases, such as management of liquidity risk

and general business risk, registered clearing agencies that are covered clearing agencies would be required to make changes to current policies and procedures, so the resulting costs, benefits and economic effects may be significant.

In order to consider the broader implications of these proposed rules on market activity, including possible effects on efficiency, competition, and capital formation, the baseline also considers the current state of clearing and settlement services, including the number of registered clearing agencies, the distribution of members across these clearing agencies, and the volume of transactions these clearing agencies process. There are currently six registered clearing agencies that provide CCP services and one registered clearing agency that provides CSD services. As shown in Table 1, membership rates vary across these clearing agencies. Together, registered clearing agencies processed over \$2 quadrillion in financial market transactions in 2012.⁵⁸²

TABLE 1—MEMBERSHIP STATISTICS FOR REGISTERED CLEARING AGENCIES⁵⁸³

	Number
CME Total Members	72
—Of which clear CDS	14
DTC Full Service Members	272
FICC GSD Members	107
MBSD Members	76
ICE Clear Credit Members	28
Clear Europe Members	79
—Clear Europe Members that clear CDS	18
NSCC Full Service Members	175
OCC Total Members	117

Registered clearing agencies are currently characterized by specialization and limited competition. Clearing and settlement services exhibit high barriers to entry and economies of scale. These features of the existing market, and the resulting concentration of clearing and settlement within a handful of entities, informs our

examination of effects of the proposed amendments and rules on competition, efficiency, and capital formation.⁵⁸⁴

2. Current Regulatory Framework for Clearing Agencies

The proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2 fit within the Commission's broad approach to regulation of the national system for clearance and settlement that comprises the baseline for the Commission's economic analysis. Key elements of the current regulatory framework for registered clearing agencies are Section 17A of the Exchange Act,⁵⁸⁵ Titles VII and VIII of the Dodd-Frank Act, and existing Rule 17Ad-22. Section 17A of the Exchange Act directs the Commission to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of securities transactions, having due regard for the public interest, the protection of investors, the safeguarding of securities and funds, and the maintenance of fair competition among brokers and dealers, clearing agencies, and transfer agents.⁵⁸⁶

Title VII, in response to the 2008 financial crisis, provides the Commission and the CFTC with authority to regulate the mandatory exchange trading and central clearing and settlement of swaps that formerly may have been OTC derivatives.⁵⁸⁷ Title VII amended Section 17A of the Exchange Act by adding new paragraphs (g) through (j) requiring the registration of clearing agencies serving the security-based swap market, giving the Commission authority to adopt rules governing security-based swap clearing agencies, and requiring compliance by registered clearing agencies with said rules. New Section 17A(i) of the Exchange Act provides that the Commission may conform standards for and oversight of clearing agencies to reflect evolving international standards.

The Clearing Supervision Act, adopted in Title VIII, provides for enhanced regulation of FMUs, such as clearing agencies, and for enhanced coordination between the Commission, the CFTC, and the Board by facilitating

⁵⁷⁷ A brief summary of the regulatory framework appears in Part 0. For a more detailed summary of the current regulatory framework, see Part 0.

⁵⁷⁸ See Clearing Agency Standards Release, *supra* note 5; see also *supra* note 25 and accompanying text (discussing the deemed registered provision).

⁵⁷⁹ See *supra* Part 0 (discussing existing requirements under Rule 17Ad-22).

⁵⁸⁰ See *supra* note 49.

⁵⁸¹ See *supra* note 50 and accompanying text.

⁵⁸² See, e.g., CME Group, 2012 Annual Report, at 2, available at <http://www.cmegroup.com/investor-relations/annual-review/2012/downloads/cme-group-2012-annual-report.pdf> (indicating \$806 trillion notional in trading volume); DTCC, 2012 Annual Report, available at <http://www.dtcc.com/about/annual-report.aspx> (indicating \$1.6 quadrillion in transactions cleared).

⁵⁸³ Membership statistics are taken from the Web sites of each of the listed clearing agencies and are current, for CME and ICE, as of October 2013; for FICC, including the Government Securities Division ("GSD") and the Mortgage-Backed Securities Division ("MBSD"), as of September 2013; for OCC as of January 2014; and for DTC and NSCC as of December 6, 2013.

⁵⁸⁴ See *infra* Part 0 (discussing the effect of the proposed rules on competition, efficiency, and capital formation).

⁵⁸⁵ See 15 U.S.C. 78q-1. For a more detailed discussion of the regulatory framework for registered clearing agencies under Section 17A of the Exchange Act, see Part 0.

⁵⁸⁶ See *supra* note 2 and accompanying text (noting the requirements of Section 17A of the Exchange Act).

⁵⁸⁷ See Dodd-Frank Act, 124 Stat. at 1641-1802. For a more detailed discussion of the regulatory framework for registered clearing agencies under Title VII, see Part 0.

examinations and information sharing.⁵⁸⁸ It also requires the Commission and the CFTC to coordinate with the Board to develop risk management supervision programs for clearing agencies designated systemically important. Section 805(a) of the Clearing Supervision Act further provides that the Commission, considering relevant international standards and existing prudential requirements, may prescribe regulations that contain risk management standards for designated clearing agencies or the conduct of designated activities by a financial institution.

Rule 17Ad-22 under the Exchange Act, adopted in 2012, requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures that are reasonably designed to meet certain minimum requirements for their operations and risk management practices on an ongoing basis. These requirements are designed to work in tandem with the SRO rule filing process and the requirement in Section 17A that the Commission must make certain determinations regarding a clearing agency's rules and operations for purposes of initial and ongoing registration.⁵⁸⁹ In its economic analysis of the rule, the Commission noted that the economic characteristics of clearing agencies, including economies of scale, barriers to entry, and the particulars of their legal mandates, may limit competition and confer market power on such clearing agencies, which may lead to lower levels of service, higher prices, or under-investment in risk management systems.⁵⁹⁰ To address these potential market failures, Rule 17Ad-22 was adopted to strengthen the substantive regulation of clearing agencies, promote the safe and reliable operation of clearing agencies, improve efficiency, transparency, and access to clearing agencies, and promote consistency with international standards.⁵⁹¹ Part IV.B.3 discusses current practices at registered clearing

agencies related to the requirements under Rule 17Ad-22.

a. Basel III Capital Requirements

In addition to requirements under the Exchange Act, the Dodd-Frank Act, and Rule 17Ad-22, other regulatory efforts are relevant to our analysis of the economic effects of proposed Rule 17Ad-22(e). In July 2012, the BCBS published the Basel III capital requirements, which set forth interim rules governing the capital charges arising from bank exposures to CCPs related to OTC derivatives, exchange-traded derivatives, and securities financing transactions.⁵⁹² Once in effect, the Basel III capital requirements will create incentives for banks to clear derivatives and securities financing transactions with CCPs licensed in a jurisdiction where the relevant regulator has adopted rules or regulations consistent with the standards set forth in the PFMI Report. Specifically, the Basel III capital requirements introduce new capital charges based on counterparty risk for banks conducting derivatives transactions or securities financing transactions through a CCP.⁵⁹³

New capital charges under the Basel III framework relate to a bank's trade exposure and default fund exposure to a CCP and are a function of multiplying these exposures by a corresponding risk weight. Historically, these exposures have carried a risk weight of zero. As banking regulators adopt rules consistent with the Basel III capital requirements, however, these weights will increase. The risk weight assigned under the Basel III capital requirements varies depending on whether the counterparty is a QCCP. For example, risk weights for trade exposures to a CCP generally would vary between 20% and 100% depending on the CCP's credit quality, while trade exposures to a QCCP would carry only a 2% risk weight.⁵⁹⁴ In addition, bank exposures to CCP default funds would carry a risk weight of 1250%. While bank exposures

to QCCP default funds will also carry a 1250% risk weight at low levels, under the Basel III framework, default fund exposures' contribution to a bank's risk weighed assets will be limited to at most 18% of the bank's trade exposures to a given QCCP.

In some jurisdictions, banking regulators have already adopted rules that implement many requirements under the Basel III framework. For example, in its Capital Requirements Directive IV, which went into effect on July 17, 2013, the E.U. incorporated into its own legal framework the Basel III framework. Article 301 contains rules governing bank exposures to CCPs that are consistent with the Basel III framework. Similarly, the BCBS reports that the Basel III capital requirements, with the exception of capital conservation buffers and countercyclical buffers, are currently in force for Japanese banks.⁵⁹⁵ Canada and Switzerland also have risk-based capital rules in place.⁵⁹⁶

In the United States, on July 9, 2013, the Board and the Office of the Comptroller of the Currency jointly issued regulatory capital rules for U.S. banks consistent with the Basel III framework. Upon its effective date of January 1, 2014, the Regulatory Capital Rules subject bank exposures to CCPs and QCCPs to increased risk weights as specified in the Basel III framework.⁵⁹⁷ In addition to specifying risk weights, the rules define the term QCCP for banks supervised by the Board and the Office of the Comptroller of the Currency.⁵⁹⁸ According to these rules, QCCP status applies to any CCP that is a designated FMU. Further, any CCP that (i) requires full collateralization of contracts on a daily basis, and (ii), as demonstrated to the satisfaction of its supervisory regulator, is in sound financial condition, is subject to supervision by the Commission, and meets or exceeds the risk management standards established by the Commission under Titles VII and VIII of the Dodd-Frank Act, is a QCCP. Based on this definition, for banks regulated by the Board and the Office of the Comptroller of the Currency, all covered clearing agencies, with the exception of ICEEU,⁵⁹⁹ will be considered QCCPs for

⁵⁸⁸ See 12 U.S.C. 5461 *et seq.* For a more detailed discussion of the regulatory framework for registered clearing agencies under Title VIII, see Part 0.

⁵⁸⁹ See Clearing Agency Standards Release, *supra* note 5. For a more detailed discussion of the regulatory framework for registered clearing agencies under Rule 17Ad-22, see Part 0. For a comparison of the requirements under proposed Rule 17Ad-22(e) and existing requirements under Rule 17Ad-22, see Part 0. For further discussion of current industry practices subject to the requirements in Rule 17Ad-22, see Part 0.

⁵⁹⁰ See *id.*

⁵⁹¹ See Clearing Agency Standards Release, *supra* note 5, at 66225, 66263-64.

⁵⁹² See *supra* note 48 (discussing the Basel III capital requirements). For a more detailed discussion of the Basel III framework, see Part 0.

⁵⁹³ Since the Basel III framework applies lower capital requirements only to bank exposures related to OTC and exchange-traded derivatives activity and securities financing transactions, the Commission currently expects that, among all registered clearing agencies, FICC, ICEEU, and OCC would be those affected by the Basel III capital requirements. Each would meet the proposed definition of "covered clearing agency."

⁵⁹⁴ The Basel III framework and rules adopted by the Board and the Office of the Comptroller of the Currency consistent with that framework apply lower risk weights of 2% or 4% to indirect exposures of banks to QCCPs. See Basel III capital requirements, *supra* note 59, paras. 114-15; Regulatory Capital Rules, *supra* note 53, at 62103.

⁵⁹⁵ See BCBS, Progress Report on Implementation of the Basel Regulatory Framework (Oct. 2013), available at <http://www.bis.org/bcbs/implementation/bpr11.htm>.

⁵⁹⁶ See *id.*

⁵⁹⁷ See Regulatory Capital Rules, *supra* note 53.

⁵⁹⁸ See *id.*

⁵⁹⁹ Although ICEEU would not be subject to QCCP treatment as a designated FMU, it would nonetheless be considered a QCCP because it is

purposes of calculating risk weights for trade exposures and default fund exposures.

In Europe, under EMIR, legal persons incorporated under the law of an E.U. member state will only be able to use non-E.U. CCPs if those CCPs have been recognized under EMIR. Further, only non-E.U. CCPs recognized under EMIR will meet the conditions necessary to be considered a QCCP for E.U. purposes. Article 25 of EMIR outlines a recognition procedure for non-E.U. CCPs and Article 89 provides a timeline for recognition.⁶⁰⁰ FICC, NSCC, and OCC applied for recognition under EMIR prior to a September 15, 2013 deadline.⁶⁰¹ As a result of applying for recognition, these covered clearing agencies will be permitted to continue to offer clearing services to existing E.U. clearing members until their applications are accepted or rejected.

Additionally, the Basel III capital requirements, as adopted by the Board, the Office of the Comptroller of the Currency, and banking regulators in other jurisdictions, impose new capital requirements related to unconditionally cancellable commitments and other off-balance sheet exposures. For example, the Board and the Office of the Comptroller of the Currency will require banks to include 10% of the notional amount of unconditionally cancellable commitments in their calculation of total leverage exposure.⁶⁰² The rules cap the ratio of tier one capital to total leverage exposure at 3% for banks subject to advanced approaches risk-based capital rules.⁶⁰³ To the extent that clearing agencies rely on financial resources from banks as part of their risk management activities, new constraints

on off-balance sheet exposures could raise the cost of these activities.

b. Other Regulatory Efforts

Efforts by the Board and the CFTC to adopt rules that are consistent with the standards set forth in the PFMI Report are also relevant to the economic analysis of the proposed rules.⁶⁰⁴ In 2012, the Board adopted Regulation HH setting forth risk management standards for designated FMUs, and, on January 10, 2014, the Board proposed amendments to Regulation HH and its PSR Policy based upon the standards set forth in the PFMI Report.⁶⁰⁵ Similarly, the CFTC has published final rules intended to be consistent with the standards set forth in the PFMI Report.⁶⁰⁶

In proposing the amendments to Rule 17Ad-22 and new Rule 17Ab2-2, the Commission is mindful of these regulations proposed by the Board and adopted by the CFTC, which seek to establish standards for designated FMUs and establish standards for certain DCOs, respectively.⁶⁰⁷ Section 712(a)(2) of Title VII requires the Commission, before commencing any rulemaking regarding, among other things, security-based swap clearing agencies, to consult and coordinate to the extent possible with the CFTC and prudential regulators for the purposes of assuring regulatory consistency and comparability where possible.⁶⁰⁸ In addition, as directed by the Clearing Supervision Act, the Commission is proposing these amendments to Rule 17Ad-22 and Rule 17Ab2-2 after giving careful consideration to the PFMI Report as the relevant international standard.

3. Current Practices

Current industry practices are a critical element of the economic baseline for registered clearing agencies. Registered clearing agencies are required to operate in compliance with existing Rule 17Ad-22 and, the Commission understands, have begun implementing some of the standards set forth in the PFMI Report. Because proposed Rule 17Ad-22(e) is consistent with those standards and furthers the objectives of Section 17A of the Exchange Act, the Clearing Supervision Act, and Title VII of the Dodd-Frank

Act, the Commission preliminarily believes that the proposed rule represents, where it imposes higher minimum standards on covered clearing agencies, an additional step towards improved risk management.

An overview of current practices is set forth below and includes discussion of covered clearing agency policies and procedures regarding general organization and risk management, including the management of legal, credit, liquidity, business, custody, investment, and operational risk. This discussion is based on the Commission's general understanding of current practices as of the date of this proposal, reflects the Commission's experience supervising registered clearing agencies, and is intended solely for the purpose of analyzing the economic effects of the Commission's proposal. The Commission notes that in each case, as SROs, registered clearing agencies are required to submit any proposed rule or any proposed change in, addition to, or deletion from the rules of the clearing agency to the Commission for review.⁶⁰⁹ The Exchange Act also requires a registered clearing agency to enforce its rules, subject to Commission oversight, and empowers the Commission to enforce the rules of a registered clearing agency.⁶¹⁰

a. General Organization

i. Legal Risk

Legal risk is the risk that a registered clearing agency's rules, policies, or procedures may not be enforceable and concerns, among other things, its contracts, the rights of members, netting arrangements, discharge of obligations, and settlement finality. Cross-border activities of a registered clearing agency may also present elements of legal risk.

Rule 17Ad-22(d)(1) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for a well-founded, transparent, and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.⁶¹¹ Each registered clearing agency makes a large portion of these

subject to regulation by the Commission. See Regulatory Capital Rules, *supra* note 53, at 62166 (defining "Qualifying Central Counterparty" at 1.iii(B)(2)).

⁶⁰⁰ See Eur. Comm'n, Practical Implementation of the EMIR Framework to Non-EU Central Counterparties (CCPs) (May 13, 2013), available at http://ec.europa.eu/internal_market/financial-markets/docs/derivatives/130513_equivalence-procedure_en.pdf.

⁶⁰¹ These three clearing agencies agreed to have their names publicly disclosed and do not necessarily represent the full set of registered clearing agencies that applied for recognition under EMIR. See ESMA, List of Central Counterparties (CCPs) Established in Non-EEA Countries Which Have Applied for Recognition Under Article 25 of Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC Derivatives, CCPs and Trade Repositories (TRs) (EMIR) (Dec. 16, 2013), available at http://www.esma.europa.eu/system/files/2013-1581_list_of_applicants_tc-ccps_version_16_december_2013.pdf.

⁶⁰² See Regulatory Capital Rules, *supra* note 53, at 62169.

⁶⁰³ See *id.* at 62284. The Regulatory Capital Rules require compliance by banks no later than 2018.

⁶⁰⁴ For a more detailed discussion of the regulatory efforts undertaken by the Board and the CFTC, see note 53.

⁶⁰⁵ See *id.*

⁶⁰⁶ See *id.*

⁶⁰⁷ See *id.* (discussing efforts by the Board and the CFTC to adopt rules consistent with the standards set forth in the PFMI Report).

⁶⁰⁸ See Dodd-Frank Act, Sec. 712(a)(2), Public Law 111-203, 124 Stat. 1376, 1641-42 (2010).

⁶⁰⁹ See *supra* Part 0 and note 95 (describing the Commission's framework for regulation of SROs and the SRO rule filing process).

⁶¹⁰ See *supra* Part 0, in particular notes 8-10 (describing the requirements applicable to registered clearing agencies under the Exchange Act and the supervisory and enforcement tools available to the Commission to facilitate compliance with those requirements under the Exchange Act).

⁶¹¹ See 17 CFR 240.17Ad-22(d)(1); Clearing Agency Standards Release, *supra* note 5, at 66245-46.

policies and procedures available to members and participants. In addition, each also publishes their rule books and other key procedures publicly in order to promote the transparency of their legal framework.⁶¹²

ii. Governance

Rule 17Ad–22(d)(8) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to have governance arrangements that are clear and transparent to fulfill the public interest requirements in Section 17A of the Exchange Act applicable to clearing agencies, to support the objectives of owners and participants, and to promote the effectiveness of the clearing agency's risk management procedures.⁶¹³ Important elements of a registered clearing agency's governance arrangements include its ownership structure; its charter, bylaws, and charters for committees of its board and management committees; its rules, policies, and procedures; the composition and role of its board, including the structure and role of board committees; reporting lines between management and the board; and the processes that provide for management accountability with respect to the registered clearing agency's performance.

Each registered clearing agency has a board that governs its operations and supervises senior management. Each registered clearing agency also has an independent audit committee of the board and has established a board committee or committee of members tasked with overseeing the clearing agency's risk management functions. The boards of registered clearing agencies that would be subject to proposed Rule 17Ad–22(e) as covered clearing agencies currently include non-management members.

iii. Framework for the Comprehensive Management of Risks

Rules 17Ad–22(b) and (d) require registered clearing agencies to establish, implement, maintain and enforce written policies and procedures reasonably designed to measure and mitigate credit exposures, identify operational risks, evaluate risks arising in connection with cross-border and domestic links for the purpose of

clearing or settling trades, achieve DVP settlement, and implement risk controls to cover the clearing agency's credit exposures to participants.⁶¹⁴ Rule 17Ad–22(d)(4) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to establish business continuity plans setting forth procedures for the recovery of operations in the event of a disruption.⁶¹⁵ Rule 17Ad–22(d)(11) further requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to make key aspects of the clearing agency's default procedures publicly available and establish default procedures that ensure that the clearing agency can take timely action to contain losses and liquidity pressures and to continue meeting its obligations in the event of a participant default.⁶¹⁶

In addition to meeting these requirements, the Commission understands that registered clearing agencies also specify actions to be taken when their resources are insufficient to cover losses faced by the registered clearing agency.⁶¹⁷ These actions may include assessment rights on clearing members, forced allocation, and contract termination.

b. Financial Risk Management

Registered clearing agencies that provide CCP services have a variety of options available to mitigate the financial risks to which they are exposed. While the manner in which a CCP chooses to mitigate these financial risks depends on the precise nature of the CCP's obligations, a common set of procedures have been implemented by many CCPs to manage credit and liquidity risks. Broadly, these procedures enable CCPs to manage their risks by reducing the likelihood of member defaults, limiting potential losses and liquidity pressure in the event of a member default, implementing mechanisms that allocate losses across members, and providing adequate resources to cover losses and meet payment obligations as required.

Registered clearing agencies that provide CCP services must be able to effectively measure their credit exposures in order to properly manage those exposures. A CCP faces the risk that its exposure to a member can change as a result of a change in prices, positions, or both. CCPs can ascertain current credit exposures to each member by, in some cases, marking each member's outstanding contracts to current market prices and, to the extent permitted by their rules and supported by law, by netting any gains against any losses. Rule 17Ad–22 includes certain requirements related to financial risk management by CCPs, including requirements to measure credit exposures to members and to use margin requirements to limit these exposures. These requirements are general in nature and provide registered clearing agencies flexibility to measure credit risk and set margin. Within the bounds of Rule 17Ad–22, CCPs may employ models and choose parameters that they conclude are appropriate to the markets they serve.

The current practices of registered clearing agencies that provide CCP services generally include the following procedures: (1) Measuring credit exposures at least once a day; (2) setting margin coverage at a 99% confidence level over some set period; (3) using risk-based models; (4) establishing a fund that mutualizes losses of defaults by one or more participants that exceed margin coverage; (5) maintaining sufficient financial resources to withstand the default of at least the largest participant family,⁶¹⁸ and (6), in

⁶¹⁸ See, e.g., IMF, Publication of Financial Sector Assessment Program Documentation—Detailed Assessment of Observance of the National Securities Clearing Corporation's Observance of the CPSS-IOSCO Recommendations for Central Counterparties, at 10 (May 2010), available at <http://www.imf.org/external/pubs/ft/scr/2010/cr10129.pdf> (assessing NSCC's observance of Recommendation 5 from the RCCP that a CCP should maintain sufficient financial resources to withstand, at a minimum, the default of a participant to which it has the largest exposure in extreme but plausible market conditions; also noting that NSCC began evaluating itself against this standard in 2009 and has backtesting results to support that it maintained sufficient liquidity to cover the failure of the largest affiliated family 99.98% of the time during the period from January through April 2009); IMF, Publication of Financial Sector Assessment Program Documentation—Detailed Assessment of Observance of the Fixed Income Clearing Corporation—Government Securities Division's Observance of the CPSS-IOSCO Recommendations for Central Counterparties, at 9–10 (2010), available at <http://www.imf.org/external/pubs/ft/scr/2010/cr10130.pdf> (finding that FICC's Government Securities Division observed the requirement to maintain enough financial resources to meet the default of its largest participant in extreme but plausible market conditions).

⁶¹² The rule book of each registered clearing agency, as well as select policies and procedures, are publically available on each registered clearing agency's Web site.

⁶¹³ See 17 CFR 240.17Ad–22(d)(8); see also Clearing Agency Standards Release, *supra* note 5, at 66251–52.

⁶¹⁴ See 17 CFR 240.17Ad–22(b) and (d); see also Clearing Agency Standards Release, *supra* note 5.

⁶¹⁵ See 17 CFR 240.17Ad–22(d)(4); see also Clearing Agency Standards Release, *supra* note 5, at 66248–49.

⁶¹⁶ See 17 CFR 240.17Ad–22(d)(11).

⁶¹⁷ See David Elliot, Central Counterparty Loss-Allocation Rules, at tbl. 1A (Bank of England Financial Stability Paper No. 20, Apr. 2013), available at http://www.bankofengland.co.uk/research/Documents/fspapers/fs_paper20.pdf (noting the loss-allocation rules applied at the end of a clearing agency waterfall).

the case of security-based swap transactions, maintaining enough financial resources to be able to withstand the default of their two largest participant families.⁶¹⁹

i. Credit Risk

Rule 17Ad-22(b)(1) requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to measure their credit exposures at least once per day.⁶²⁰ Several CCPs have policies and procedures designed to require measuring credit exposures multiple times per day.

Rule 17Ad-22(b)(3) requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain sufficient financial resources to withstand, at a minimum, a default by the participant family to which it has the largest exposure in extreme but plausible market conditions.⁶²¹ It further requires CCPs for security-based swaps to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain additional financial resources sufficient to withstand, at a minimum, a default by the two participant families to which it has the largest exposures in extreme but plausible market conditions, in its capacity as a CCP for security-based swaps.⁶²² Accordingly, the Commission notes that Rule 17Ad-22(b)(3) imposes a “cover two” requirement on CCPs for security-based swaps in order to protect such CCPs from the extreme jump-to-default risk and nonlinear payoffs associated with the nature of the financial products they clear and the participants in the markets they serve. Meanwhile, CCPs that clear products other than security-based swaps are subject to a “cover one” requirement.⁶²³ Rule 17Ad-22(b)(3) also

states that such policies and procedures may provide that additional financial resources be maintained by the CCP in combined or separately maintained funds.⁶²⁴

Under existing rules, CCPs collect contributions from their members for the purpose of establishing guaranty or clearing funds to mutualize losses under extreme but plausible market conditions. Currently, the guaranty funds or clearing funds consist of liquid assets and their sizes vary depending on a number of factors, including the products the CCP clears and the characteristics of CCP members. In particular, the guaranty funds for CCPs that clear security-based swaps are relatively larger, as measured by the size of the fund as a percentage of the total and largest exposures, than the guaranty or clearing funds maintained by CCPs for other financial instruments. CCPs generally take the liquidity of collateral into account when determining member obligations. Applying haircuts to assets posted as margin, among other things, mitigates the liquidity risk associated with selling margin assets in the event of a participant default.

ii. Collateral and Margin

Rule 17Ad-22(b)(2) requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to use margin requirements to limit their exposures to participants.⁶²⁵ This margin can also be used to reduce a CCP's losses in the event of a participant default.

Registered clearing agencies that provide CCP services take positions as substituted counterparties once their trade guarantee goes into effect. Therefore, if a counterparty whose obligations the registered clearing agency has guaranteed defaults, the covered clearing agency may face market risk, which can take one of two forms. First, a covered clearing agency is subject to the risk of movement in the market prices of the defaulting member's open positions. Where a seller defaults and fails to deliver a security, the covered clearing agency may need to step into the market to buy the security in order to complete settlement and deliver the security to the buyer. Similarly, where a buyer defaults, the covered clearing agency may need to meet payment obligations to the seller. Thus, in the interval between when a member defaults and when the covered clearing agency must meet its

obligations as a substituted counterparty in order to complete settlement, market price movements expose the covered clearing agency to market risk. Second, the covered clearing agency may need to liquidate non-cash margin collateral posted by the defaulting member. The covered clearing agency is therefore exposed to the risk that erosion in market prices of the collateral posted by the defaulting member could result in the covered clearing agency having insufficient financial resources to cover the losses in the defaulting member's open positions.

To manage their exposure to market risk resulting from fulfilling a defaulting member's obligations, registered clearing agencies compute margin requirements using inputs such as portfolio size, volatility, and sensitivity to various risk factors that are likely to influence security prices. Moreover, since the size of price movements is, in part, a function of time, registered clearing agencies may limit their exposure to market risk by marking participant positions to market daily and, in some cases, more frequently. CCPs also use similar factors to determine haircuts applied to assets posted by members in satisfaction of margin requirements. To manage market risk associated with collateral liquidation, CCPs consider the current prices of assets posted as collateral and price volatility, asset liquidity, and the correlation of collateral assets and a member's portfolio of open positions. Further, because CCPs need to value their margin assets in times of financial stress, their rulebooks may include features such as market-maker domination charges that increase clearing fund obligations regarding open positions of members in securities in which the member serves as a dominant market maker. The reasoning behind this charge is that, should a member default, liquidity in products in which the member makes markets may fall, leaving these positions more difficult to liquidate for non-defaulting participants.

Rule 17Ab-22(b)(2) also requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for risk-based models and parameters to set margin requirements.⁶²⁶ The generally recognized standard for such models and parameters is, under normal market conditions, price movements that produce changes in exposures that are expected to breach margin requirements

⁶¹⁹ See, e.g., CFTC-SEC Staff Roundtable on Clearing of Credit Default Swaps, at 123 (Oct. 2010), available at http://www.cftc.gov/ucm/groups/public/@swaps/documents/dsubmission7/dfsubmission7_102210-transcrip.pdf (Stan Ivanov of ICE stating, “[A]t ICE we look at two simultaneous defaults of the two biggest losers upon extreme conditions”); see also ICE, CDS Client Clearing Overview, at 8 (Aug. 2013), available at https://www.theice.com/publicdocs/clear_credit/ICE_Clear_Credit_Client_Clearing_Overview.pdf (noting that the guaranty fund covers the simultaneous default of the two largest clearing members); CME Rulebook, Ch. 8H, Rule 8H07, available at <http://www.cmegroup.com/rulebook/CME/1/8H/8H.pdf>.

⁶²⁰ See 17 CFR 240.17Ad-22(b)(1).

⁶²¹ See 17 CFR 240.17Ad-22(b)(2).

⁶²² See *id.*

⁶²³ See *supra* Part 0 and *infra* Part 0 (discussing the related “cover one” and “cover two” requirements in proposed Rule 17Ad-22(e)(4)).

⁶²⁴ See *id.*

⁶²⁵ See 17 CFR 240.17Ad-22(b)(2).

⁶²⁶ See *id.*

or other risk controls only 1% of the time (*i.e.*, at a 99% confidence interval) over a designated time horizon.⁶²⁷ Currently, CCPs use margin models to ensure coverage at a single-tailed 99% confidence interval. Losses beyond this level are typically covered by the CCP's guaranty fund. This standard comports with existing international standards for bank capital requirements, which require banks to measure market risks at a 99% confidence interval when determining regulatory capital requirements.⁶²⁸

Rule 17Ad–22(b)(2) also requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to review such margin requirements and the related risk-based models and parameters at least monthly.⁶²⁹ CCPs are accordingly required to establish a model validation process that evaluates the adequacy of margin models, parameters, and assumptions. Additionally, CCPs are required to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide for an annual model validation consisting of evaluating the performance of the CCPs' margin models and the related

parameters and assumptions associated with such models by a qualified person who is free from influence from the persons responsible for the development or operation of the models being validated.⁶³⁰

iii. Liquidity Risk

In addition to credit risk and the aforementioned market risk, registered clearing agencies also face liquidity or funding risk. Currently, to complete the settlement process, registered clearing agencies that employ netting rely on incoming payments from participants in net debit positions in order to make payments to participants in net credit positions. If a participant does not have sufficient funds or securities in the form required to fulfill a payment obligation immediately when due (even though it may be able to pay at some future time), or if a settlement bank is unable to make an incoming payment on behalf of a participant, a registered clearing agency may face a funding shortfall. Such funding shortfalls may occur due to a lack of financial resources necessary to meet delivery or payment obligations, however even registered clearing agencies that do hold sufficient financial resources to meet their obligations may not carry those in the form required for delivery or payments to participants.

A registered clearing agency that provides CCP services may hold additional financial resources to cover potential funding shortfalls in the form of collateral. As noted above, CCPs may take the liquidity of collateral into account when determining member obligations. Applying haircuts to illiquid assets posted as margin mitigates the liquidity risk associated with selling margin assets in the event of participant default. Some registered CCPs also arrange for liquidity provision from other financial institutions using lines of credit. Additionally, some registered clearing agencies enter into prearranged funding agreements with their members pursuant to their rules. For example, members of one registered clearing agency are obligated to enter into repurchase agreements against securities that would have been delivered to a defaulting member.

No rule under the Exchange Act currently requires a registered clearing agency through its written policies and procedures to address liquidity risk.

c. Settlement

Rule 17Ad–22(d)(5) requires a registered clearing agency to establish, implement, maintain and enforce

written policies and procedures reasonably designed to employ money settlement arrangements that eliminate or strictly limit the clearing agency's settlement bank risks and require funds transfers to the clearing agency to be final when effected.⁶³¹ Rule 17Ad–22(d)(12) further requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure that final settlement occurs no later than the end of the settlement day.⁶³² Accordingly, for example, certain registered clearing agencies provide for final settlement of securities transfers no later than the end of the day of the transaction. Rule 17Ad–22(d)(15) also requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to state to its participants the clearing agency's obligations with respect to physical deliveries and identify and manage the risks from these obligations.⁶³³

d. CSDs and Exchange-of-Value Settlement Systems

i. CSDs

Rule 17Ad–22(d)(10) requires a registered clearing agency that provides CSD services to establish, implement, maintain and enforce written policies and procedures reasonably designed to maintain securities in an immobilized or dematerialized form for transfer by book entry to the greatest extent possible. Currently, some securities, such as mutual fund securities and government securities, are issued primarily or solely on a dematerialized basis. Dematerialized shares do not exist as physical certificates but are held in book entry form in the name of the owner (which, where the master security holder file is not maintained on paper due to the use of technology, is also referred to as electronic custody). Other types of securities may be issued in the form of one or more physical security certificates, which could be held by the CSD to facilitate immobilization. Alternatively, securities may be held by the beneficial owner in record name, in the form of book-entry positions, where the issuer offers the ability for a security holder to hold through the direct registration system. Whether immobilization occurs at the CSD or through direct registration depends on what is provided for by the issuer.

⁶²⁷ See 17 CFR 240.17Ad–22(a)(4). The Commission notes that because it is proposing to add new definitions to Rule 17Ad–22(a), “normal market conditions” would appear in Rule 17Ad–22(a)(12) in the event the proposed rules are adopted. The Commission is not proposing to alter the definition of “normal market conditions.”

⁶²⁸ See BCBS, International Convergence of Capital Measurement and Capital Standards: A Revised Framework (June 2004), available at <http://www.bis.org/publ/bcbs107.pdf>; see also Darryll Hendricks & Beverly Hirtle, New Capital Rule Signals Supervisory Shift (Secondary Mortgage Mkts, Sept. 1998), available at http://www.freddiemac.com/finance/smm/july98/pdfs/hen_hirt.pdf.

Prior to this standard, banks measured value-at-risk using a range of confidence intervals from 90–99%. See BCBS, An Internal Model-Based Approach to Market Risk Capital Requirements, at 12 (Apr. 1995), available at <http://www.bis.org/publ/bcbs17.pdf>. When determining the minimum quantitative standards for calculating risk measurements, the BCBS noted then the importance of specifying “a common and relatively conservative confidence level,” choosing the 99% confidence interval over other less conservative measures. See *id.*

Since its adoption in 1998, the standard has become a generally recognized practice of banks to quantify credit risk as the worst expected loss that a portfolio might incur over an appropriate time horizon at a 99% confidence interval. See Kenji Nishiguchi, Hiroshi Kawai & Takanori Sazaki, Capital Allocation and Bank Management Based on the Quantification of Credit Risk, at 83 (FRBNY Econ. Policy Rev., Oct. 1998), available at <http://www.newyorkfed.org/research/epr/98v04n3/9810nish.pdf>; Jeff Aziz & Narat Charupatt, Calculating Credit Exposure and Credit Loss: A Case Study, at 34 (Sept. 1998), available at <http://www.bis.org/bcbs/ca/alrequse98.pdf>.

⁶²⁹ See 17 CFR 240.17Ad–22(b)(2).

⁶³⁰ See 17 CFR 240.17Ad–22(b)(4).

⁶³¹ See 17 CFR 240.17Ad–22(d)(5).

⁶³² See 17 CFR 240.17Ad–22(d)(12).

⁶³³ See 17 CFR 240.17Ad–22(d)(15).

When a trade occurs, the depository's accounting system credits one participant account and debits another participant account. Transactions between counterparties in dematerialized shares are recorded by the registrar responsible for maintaining the paper or electronic register of security holders, such as by a transfer agent, and reflected in customer accounts.

Registered CSDs currently reconcile ownership positions in securities against CSD ownership positions on the security holders list daily, mitigating the risk of unauthorized creation or deletion of shares.

ii. Exchange-of-Value Settlement Systems

Rule 17Ad-22(d)(13) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to eliminate principal risk by linking securities transfers to funds transfers in a way that achieves delivery versus payment,⁶³⁴ which serves to link obligations by conditioning the final settlement of one upon the final settlement of the other. One registered clearing agency, for example, operates a Model 2 DVP system that provides for gross securities transfers during the day followed by an end-of-day net funds settlement. Under the rules governing the clearing agency's system, the delivering party in a DVP transaction is assured that it will be paid for the securities once they are credited to the receiving party's securities account. DVP eliminates the risk that a buyer would lose the purchase price of a security purchased from a defaulting seller or that a seller would lose the sold security without receiving payment for a security acquired by a defaulting buyer.

For example, one registered clearing agency has rules governing its continuous net settlement ("CNS") system, under which it becomes the counterparty for settlement purposes at the point its trade guarantee attaches, thereby assuming the obligation of its members that are receiving securities to receive and pay for those securities, and the obligation of members that are delivering securities to make the delivery. Unless the clearing agency has invoked its default rules, it is not obligated to make those deliveries until it receives from members with delivery obligations deliveries of such securities; rather, deliveries that come into CNS

ordinarily are promptly redelivered to parties that are entitled to receive them through an allocation algorithm. Members are obligated to take and pay for securities allocated to them in the CNS process. These rules also provide mechanisms to allow receiving members a right to receive high priority in the allocation of deliveries, and also permit a member to buy-in long positions that have not been delivered to it by the close of business on the scheduled settlement date.

e. Default Management

i. Participant-Default Rules and Procedures

Rule 17Ad-22(d)(11) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to make key aspects of its default procedures publicly available and establish default procedures that ensure it can take timely action to contain losses and liquidity pressures and to continue meeting its obligations in the event of a participant default. The rules of registered clearing agencies typically state what constitutes a default, identify whether the board or a committee of the board may make that determination, and describe what steps the clearing agency may take to protect itself and its members. In this regard, registered clearing agencies typically attempt, among other things, to hedge and liquidate a defaulting member's positions. Rules of registered clearing agencies also include information about the allocation of losses across available financial resources.

ii. Segregation and Portability

No rule under the Exchange Act currently requires a registered clearing agency through its written policies and procedures to enable the portability of positions of a member's customers and the collateral provided in connection therewith. Additionally, no rule under the Exchange Act currently requires a registered clearing agency through its written policies and procedures to protect the positions of a member's customers from the default or insolvency of the member.⁶³⁵

⁶³⁵ See *supra* note 293 (discussing existing rules applicable to registered broker-dealers that address customer security positions and funds in cash securities and listed option markets, thereby promoting segregation and portability at the broker-dealer level).

f. General Business and Operational Risk Management

i. General Business Risk

Business risk refers to the risks and potential losses arising from a registered clearing agency's administration and operation as a business enterprise that are neither related to member default nor separately covered by financial resources designated to mitigate credit or liquidity risk. While Rule 17Ad-22 sets forth requirements for registered clearing agencies to identify, monitor, and mitigate or eliminate a broad array of risks through written policies and procedures, no rule under the Exchange Act expressly requires a registered clearing agency through its written policies and procedures to identify, monitor, and manage general business risk or to meet a capital requirement. Nonetheless, registered clearing agencies currently have certain internal controls in place to mitigate business risk. Some clearing agencies, for instance, have policies and procedures that identify an auditor who is responsible for examining accounts, records, and transactions, as well as other duties prescribed in the audit program. Other registered clearing agencies allow members to collectively audit the books of the clearing agency on an annual basis, at their own expense.

ii. Custody and Investment Risks

Registered clearing agencies face default risk from commercial banks that they use to effect money transfers among participants, to hold overnight deposits, and to safeguard collateral. Rule 17Ad-22(d)(3) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to (i) hold assets in a manner that minimizes risk of loss or delay in its access to them; and (ii) invest assets in instruments with minimal credit, market, and liquidity risks.⁶³⁶ Registered clearing agencies currently seek to minimize the risk of loss or delay in access by holding assets that are highly liquid (*e.g.*, cash, U.S. Treasury securities, or securities issued by a U.S. government agency) and by engaging banks to custody the assets and facilitate settlement. Typically, registered clearing agencies take steps to ensure that assets held in custody are protected from claims from the custodian's creditors using trust accounts or equivalent arrangements. Additionally, designated clearing agencies may gain access to account

⁶³⁴ See 17 CFR 240.17Ad-22(d)(13); see also Clearing Agency Standards Release, *supra* note 5, at 66256.

⁶³⁶ See 17 CFR 240.17Ad-22(d)(3).

services at a Federal Reserve Bank, to the extent such services are not already available as the result of other laws and regulations.⁶³⁷

iii. Operational Risk

Operational risk refers to a broad category of potential losses arising from deficiencies in internal processes, personnel, and information technology. Registered clearing agencies face operational risk from both internal and external sources, including human error, system failures, security breaches, and natural or man-made disasters. Rule 17Ad-22(d)(4) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to identify sources of operational risk and to minimize those risks through the development of appropriate systems, controls and procedures.⁶³⁸ It also requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to (i) implement systems that are reliable and secure, and have adequate, scalable capacity; and (ii) have business continuity plans that allow for timely recovery of operations and fulfillment of a clearing agency's obligations.⁶³⁹

As a result, registered clearing agencies have developed and currently maintain plans to assure the safeguarding of securities and funds, the integrity of automated data processing systems, and the recovery of securities, funds, or data under a variety of loss or destruction scenarios.⁶⁴⁰ These plans may include turning operations over to a secondary site that is located a sufficient distance from the primary location to ensure a distinct geographic risk profile. In addition, registered clearing agencies generally maintain an internal audit department to review the adequacy of their internal controls, procedures, and records with respect to operational risks. Some registered clearing agencies also engage independent accountants to perform an annual study and evaluation of the

internal controls relating to their operations.⁶⁴¹

g. Access

i. Access and Participation Requirements

Rule 17Ad-22(b)(5) requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide the opportunity for a person that does not perform any dealer or security-based swap dealer services to obtain membership on fair and reasonable terms at the clearing agency to clear securities for itself or on behalf of other persons.⁶⁴² Rule 17Ad-22(b)(6) requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to have membership standards that do not require participants to maintain a portfolio of any minimum size or a minimum transaction volume.⁶⁴³ Rule 17Ad-22(b)(7) requires a registered clearing agency that provides CCP services to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide a person that maintains net capital equal or greater than \$50 million with the ability to obtain membership at the clearing agency, provided such persons are able to comply with reasonable membership standards, with higher net capital requirements permissible subject to Commission approval.⁶⁴⁴

In addition, Rule 17Ad-22(d)(2) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency, have procedures in place to monitor that participation requirements are met on an ongoing basis, and have participation requirements that are objective and publicly disclosed, and permit fair and open access.⁶⁴⁵ Typically, a registered clearing agency's rulebook requires applicants for membership to provide certain financial and operational information prior to being admitted as a

member and on an ongoing basis as a condition of continuing membership. Registered clearing agencies review this information to ensure that the applicant has the operational capability to meet the other demands of interfacing with the clearing agency. In particular, registered clearing agencies typically require that an applicant demonstrate that it has adequate personnel capable of handling transactions with the clearing agency and adequate physical facilities, books and records, and procedures to fulfill its anticipated commitments to, and to meet the operational requirements of, the clearing agency and other members with necessary promptness and accuracy. As a result, an applicant needs to demonstrate that it has adequate personnel capable of handling transactions with the clearing agency and adequate physical facilities, books and records, and procedures to conform to conditions or requirements in these areas that the clearing agency reasonably may deem necessary for its protection. Registered clearing agencies have published these requirements on their Web sites.

Registered clearing agencies use an ongoing monitoring process to help them understand relevant changes in the financial condition of their members and to mitigate credit risk exposure of the clearing agency to its members. The risk management staff analyzes financial statements filed with regulators, as well as information obtained from other SROs and gathered from various financial publications, so that the clearing agency may evaluate, for instance, whether members maintain sufficient financial resources and robust operational capacity to meet their obligations as participants in the clearing agency pursuant to existing Rule 17Ad-22(d)(2)(i).

Table 1 contains membership statistics for registered clearing agencies.⁶⁴⁶ Current membership generally reflects features of cleared markets. The decision to become a clearing member depends on the products being cleared, the structure of these asset markets as well as the current state of regulation for cleared markets. For example, the structure of security-based swap markets and the payoffs to security-based swap contracts differs markedly from that of equity markets and common stock, which may explain some of the differences between the concentrated membership of certain clearing agencies and the relatively broader membership of others.

⁶³⁷ See *supra* Part 0 (discussing the requirement under proposed Rule 17Ad-22(e)(7)(iii) for a covered clearing agency to have policies and procedures reasonably designed to ensure it has access to account services at a Federal Reserve Bank or other relevant central bank).

⁶³⁸ See 17 CFR 240.17Ad-22(d)(4).

⁶³⁹ See *id.*

⁶⁴⁰ Many of these practices had been previously developed pursuant to prior Commission guidelines. See ARP I and II, *supra* note 324; see also *supra* note 326 (discussing related requirements under proposed Regulation SCI).

⁶⁴¹ See, e.g., NSCC, Assessment of Compliance with the CPSS/IOSCO Recommendations for Central Counterparties (Nov. 2011), available at <http://www.dtcc.com/legal/policy-and-compliance.aspx>.

⁶⁴² See 17 CFR 240.17Ad-22(b)(5).

⁶⁴³ See 17 CFR 240.17Ad-22(b)(6).

⁶⁴⁴ See 17 CFR 240.17Ad-22(b)(7).

⁶⁴⁵ See 17 CFR 240.17Ad-22(d)(2).

⁶⁴⁶ See *supra* Part 0.

ii. Tiered Participation Arrangements

Tiered participation arrangements occur when clearing members (direct participants) provide access to clearing services to third parties (indirect participants). No rule under the Exchange Act currently requires a registered clearing agency through its written policies and procedures to identify, monitor, and manage material risks arising from tiered participation arrangements. The Commission understands, however, that certain registered clearing agencies have policies and procedures currently in place in order to identify, monitor, or manage such arrangements. Specifically, such clearing agencies rely on information gathered from, and distributed by, direct participants in order to manage these tiered participation arrangements. For example, under some covered clearing agencies' rules, direct participants generally have the responsibility to indicate to the clearing agency whether a transaction submitted for clearing represents a proprietary or customer position. Such rules further require direct participants to calculate, and notify the clearing agency of the value of, each customer's collateral. Direct participants also communicate with indirect participants regarding the clearing agency's margin and other requirements.

iii. Links

Rule 17Ad-22(d)(7) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to evaluate the potential sources of risks that can arise when the clearing agency establishes links either cross-border or domestically to clear or settle trades, and ensure that the risks are managed prudently on an ongoing basis.⁶⁴⁷

Each registered clearing agency is linked to other clearing organizations, trading platforms, and service providers. For instance, a link between U.S. and Canadian clearing agencies allows U.S. members to clear and settle valued securities transactions with participants of a Canadian securities depository. The link is designed to facilitate cross-border transactions by allowing members to use a single depository interface for U.S. and Canadian dollar transactions and eliminate the need for split inventories.⁶⁴⁸ Registered clearing

agencies that provide CCP services currently establish links to allow members to realize collateral and other operational efficiencies.

h. Efficiency

i. Efficiency and Effectiveness

Rule 17Ad-22(d)(6) requires a registered clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to require the clearing agency to be cost-effective in meeting the requirements of participants while maintaining safe and secure operations.⁶⁴⁹ Registered clearing agencies have procedures to control costs and to regularly review pricing levels against operating costs. These clearing agencies may use a formal budgeting process to control expenditures, and may review pricing levels against their costs of operation during the annual budget process. Registered clearing agencies also analyze workflows in order to make recommendations to improve their operating efficiency.

ii. Communication Procedures and Standards

Although no rule under the Exchange Act expressly requires a registered clearing agency through its written policies and procedures to use or accommodate relevant internationally accepted communication procedures and standards, the Commission believes that registered clearing agencies already use these standards. Registered clearing agencies typically rely on electronic communication with market participants, including members. For example, some registered clearing agencies have rules in place stating that clearing members must retrieve instructions, notices, reports, data, and other items and information from the clearing agency through electronic data retrieval systems. Some registered clearing agencies have the ability to rely on signatures transmitted, recorded, or stored through electronic, optical, or similar means. Other clearing agencies have policies and procedures that provide for certain emergency meetings using telephonic or other electronic notice.

i. Transparency

Transparency requirements and disclosures by registered clearing agencies serve to limit the size of potential information asymmetries between registered clearing agencies, their members, and market participants. Rule 17Ad-22(d)(9) requires a registered

clearing agency to establish, implement, maintain and enforce written policies and procedures reasonably designed to provide market participants with sufficient information for them to identify and evaluate risks and costs associated with using the clearing agency's services.⁶⁵⁰ Information regarding the operations and services of each registered clearing agency can be viewed publicly either on the clearing agency's Web site or a Web site maintained by an affiliate of the clearing agency. Because registered clearing agencies are SROs,⁶⁵¹ changes to their rules are published by the Commission and are available for public viewing on each clearing agency's Web site.⁶⁵²

Besides providing market participants with information on the risks and costs associated with their services, registered clearing agencies regularly provide information to their members to assist them in managing their risk exposures and potential funding obligations. Some of these disclosures may be common to all members—such as information about the composition of clearing fund assets—while other disclosures that concern particular positions or obligations may only be made to individual members.

4. Determinations by the Commission

Currently, although Rule 17Ad-22(d) applies to registered clearing agencies, no mechanism exists for the Commission to make determinations with regard to covered clearing agencies of the type that would occur under proposed Rule 17Ab2-2.⁶⁵³

C. Consideration of Benefits, Costs, and the Effect on Competition, Efficiency, and Capital Formation

The discussion below sets forth the potential economic effects stemming from the proposed rules. The section begins by framing more general economic issues related to the proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2. The discussion that follows considers the effects of the proposed rules on efficiency, competition, and capital formation. The section ends with a discussion of the benefits and costs flowing from specific provisions of the proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2.

⁶⁵⁰ See 17 CFR 240.17Ad-22(d)(9).

⁶⁵¹ See *supra* Part 0 and note 95 (describing the Commission's framework for regulation of SROs and the SRO rule filing process).

⁶⁵² See *supra* note 362 (discussing requirements under Rule 19b-4(i)).

⁶⁵³ See proposed Rule 17Ab2-2, *infra* Part 0.

⁶⁴⁷ See 17 CFR 240.17Ad-22(d)(7).

⁶⁴⁸ See Exchange Act Release No. 52784 (Nov. 16, 2005), 71 FR 70902 (Nov. 23, 2005); Exchange Act Release No. 55239 (Feb. 5, 2007), 72 FR 6797 (Feb. 13, 2007).

⁶⁴⁹ See 17 CFR 240.17Ad-22(d)(6).

1. General Economic Considerations

The proposed amendments to Rule 17Ad–22, taken as a whole, would likely produce economic effects that are either conditioned on multiple provisions of proposed Rule 17Ad–22(e) being implemented as a set or are simply common to multiple provisions of the proposal. Since these economic effects are attributable in some way to each of the individual subsections of proposed Rule 17Ad–22(e), this section considers potential impacts of the proposed amendments, as a whole, through their effects on systemic risk, the discretion with which covered clearing agencies operate, market integrity, concentration in the market for clearing services and among clearing members, and QCCP status.

a. Systemic Risk

A large portion of financial activity in the United States ultimately flows through one or more registered clearing agencies that would become covered clearing agencies under the proposed rules. These clearing agencies have direct links to members and indirect links to the customers of members. They are also linked to each other through common members, operational processes, and in some cases cross-margining and cross-guaranty agreements. These linkages allow covered clearing agencies to provide opportunities for risk-sharing but also allow them to serve as potential conduits for risk transmission. Covered clearing agencies play an important role in fostering the proper functioning of financial markets. If they are not effectively managed, however, they may transmit financial shocks, particularly on days of market stress.

The centralization of clearance and settlement activities at covered clearing agencies allows market participants to reduce costs, increase operational efficiency, and manage risks more effectively.⁶⁵⁴ While providing benefits to market participants, the concentration of these activities at a covered clearing agency implicitly exposes market participants to the risks faced by covered clearing agencies themselves, making risk management at covered clearing agencies a key element of systemic risk mitigation.

b. Discretion

The Commission recognizes that the degree of discretion permitted by the proposed rules partially determines their economic effect. Even where current practices at covered clearing agencies would not need to change

significantly to comply with the proposed rules, covered clearing agencies could still potentially face costs associated with the limitations on discretion that will result from the proposed rules, including costs related to limiting a clearing agency's flexibility to respond to changing economic environments. For example, to the extent that covered clearing agencies currently in compliance with the proposed rules value the ability to periodically allow net liquid assets to drop below the minimum level specified by the proposed rules, they may incur additional costs because under the proposed rules they lose the option to do so.

Although there may be costs to limiting the degree of discretion covered clearing agencies have over risk management policies and procedures, the Commission preliminarily believes there are also potential benefits. As discussed above, clearing agencies may not fully internalize the social costs of poor internal controls and thus, given additional discretion, may not craft appropriate risk management policies and procedures. For example, even if existing regulation provides clearing agencies with the incentives necessary to manage risks appropriately in a static sense, they may not provide clearing agencies with incentives to update their risk management programs in response to dynamic market conditions. Additionally, efforts at cost reduction or profit maximization could encourage clearing agencies to reduce the quality of risk management by, for example, choosing to update parameters and assumptions rapidly in periods of low volatility while maintaining stale parameters and assumptions in periods of high volatility. By reducing covered clearing agencies' discretion over their policies and procedures, the proposed amendments to Rule 17Ad–22 may reduce the likelihood that risk management practices lag behind changing market conditions by requiring periodic analysis of model performance while paying particular attention to periods of high volatility or low liquidity.

Subjecting covered clearing agencies to more specific requirements may have other benefits for cleared markets as well. Recent academic research has explored the ways in which regulation affects liquidity in financial markets when participants are "ambiguity averse," where ambiguity is defined as uncertainty over the set of payoff distributions for an asset.⁶⁵⁵ Such

investors may heavily weigh worst-case scenarios when they decide whether to hold the asset. The Commission preliminarily believes that regulation aimed at enhancing standards for covered clearing agencies while reducing their discretion may reduce the ambiguity associated with holding cleared assets in the presence of credit risk and settlement risk⁶⁵⁶ and thus may allow investors to rule out worst-case states of the world. In this regard, more specific rules may encourage participation in cleared markets by investors that benefit from resulting risk-sharing opportunities.⁶⁵⁷

c. Market Integrity

The Commission preliminarily believes that the proposed amendments to Rule 17Ad–22 could provide the benefit of reduced potential for market fragmentation that may arise from different requirements across regulatory regimes. These benefits would flow to markets that are also supervised by the Board and the CFTC, and internationally, since cleared markets are global in nature and linked to one another through common participants.

Based on its consultation and coordination with other regulators, the Commission preliminarily believes its proposal is consistent and comparable, where possible and appropriate, with the rules and policy statement proposed by the Board and the rules adopted by the CFTC. The Board's proposed revisions to its PSR Policy incorporate only the headline principles contained in the PFMI Report and are consistent with the Commission's approach in proposed Rule 17Ad–22(e).⁶⁵⁸

With respect to the rules proposed by the Board and adopted by the CFTC, in

18 J. Mathematical Econ. 141 (1989) (proposing an axiomatic foundation of a decision rule based on maximizing expected minimum payoff of a strategy).

⁶⁵⁶ Specifically, by performing key roles in the transaction process, clearing agencies serve to maintain higher minimum payoffs in poor states of the world, by, for example, immobilizing securities or adopting DVP systems.

⁶⁵⁷ See e.g., David Easley & Maureen O'Hara, Microstructure and Ambiguity, 65 J. Fin. 1817 (2010) (using a theoretical model of trade on venues that differ in rules, the authors show how rules that reduce market-related ambiguity may induce a participatory equilibrium).

⁶⁵⁸ The Commission preliminarily notes that the Commission's proposal provides a greater level detail than the proposed PSR Policy and is tailored to take into account considerations particular to covered clearing agencies, consistent with the Commission's role as the supervisory agency under the Clearing Supervision Act. The Commission further notes that, in contrast to the Board's PSR Policy, proposed Rule 17Ad–22(e) would constitute an enforceable federal regulation if adopted. See proposed PSR Policy, *supra* note 53, at 2841 (distinguishing the legal effect of proposed Reg. HH from the proposed PSR Policy).

⁶⁵⁴ Cf. PFMI Report, *supra* note 1, at 9.

⁶⁵⁵ See e.g., Itzhak Gilboa & David Schmeidler, Maxmin Expected Utility with Non-Unique Prior,

many instances the rules proposed by the Commission are consistent with these regulatory provisions, as each of the three rule sets are intended to be consistent with the headline principles contained in the PFMI Report,⁶⁵⁹ but the Commission's proposals differ from those requirements proposed by the Board and adopted by the CFTC in terms of the specific portions of the key considerations and explanatory text contained in the PFMI Report that are, or are not, referenced or emphasized. In some cases, the Commission is proposing more specific requirements than those proposed by the Board or adopted the CFTC, and, in others, it is proposing rules with fewer additional specific requirements.

The following discussion provides examples of proposed rule provisions that are representative of the differences between the Commission's proposal and the Board's proposal and the CFTC's final rules, where the Commission is proposing more detailed requirements than those proposed by the Board or adopted by the CFTC:

- In proposing Rule 17Ad-22(e)(4), the Commission would explicitly permit a covered clearing agency's policies and procedures to be reasonably designed to maintain financial resources either in combined or separately maintained clearing or default funds. Rules proposed by the Board and adopted by the CFTC do not include a comparable provision. The Commission preliminarily believes this requirement is appropriate because permitting a covered clearing agency to maintain a separate default fund for purposes of complying with proposed Rules 17Ad-22(e)(4)(ii) and (iii) increases the range of options available to covered clearing agencies when complying with this requirement and, when used

appropriately, will allow a covered clearing agency to distribute the costs and responsibilities of clearing membership more equitably among clearing members.

- In proposing Rule 17Ad-22(e)(7), the Commission would permit a covered clearing agency's policies and procedures to include as qualifying liquid resources (i) assets that are readily available and convertible into cash through prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the board of directors of the covered clearing agency, following a review conducted for this purpose not less than annually, and (ii) other assets that are readily available and eligible for pledging to a relevant central bank, if the covered clearing agency has access to routine credit at such central bank that permits said pledges or other transactions by the covered clearing agency. Rules proposed by the Board do not include a provision comparable to either of these two proposed requirements, and rules adopted by the CFTC do not include a provision including as qualifying liquid resources assets readily available and eligible for pledging to a central bank.⁶⁶⁰

The Commission preliminarily believes this requirement is appropriate given the specific circumstances of the U.S. securities markets. U.S. securities markets are among the largest and most liquid in the world, and CCPs operating in the United States are also among the largest in the world. The resulting peak liquidity demands of CCPs are therefore proportionately large on both an individual and an aggregate basis, and the ability of CCPs to satisfy a requirement limiting qualifying liquid resources to committed facilities could be constrained by the capacity of traditional liquidity sources in the U.S. banking sector in certain circumstances. The Commission preliminarily believes that limiting the funding arrangements that are included within the definition of qualifying liquid resources to committed funding arrangements is not appropriate in the case of the U.S. securities markets and expanding the concept of qualifying liquid resources to include other highly reliable funding arrangements is necessary and appropriate to ensure the proper functioning of covered clearing agencies under the Exchange Act. For similar reasons, the Commission preliminarily believes it is appropriate to include in

the definition of qualifying liquid resources assets that a central bank would permit a covered clearing agency to use as collateral, to the extent such covered clearing agency has access to routine credit at such central bank.

- In proposing Rule 17Ad-22(e)(13), the Commission would explicitly require a covered clearing agency's policies and procedures to be reasonably designed to ensure that the covered clearing agency has the authority and operational capacity to contain losses and liquidity demands in a timely manner and to continue to meet its obligations by, among other things, addressing the allocation of credit losses the covered clearing agency may face. Rules proposed by the Board and adopted by the CFTC do not include a comparable provision to address the allocation of credit losses.⁶⁶¹ The Commission preliminarily believes this requirement is appropriate to help ensure that credit losses a covered clearing agency may reasonably be expected to experience are capable of allocation through pre-established practices of the covered clearing agency. The proposed rule would also facilitate the orderly handling of member defaults and provide certainty and transparency by enabling members to understand their obligations to the covered clearing agency in extreme circumstances *ex ante*.

- In proposing Rule 17Ad-22(e)(18), the Commission would explicitly require a covered clearing agency's policies and procedures to be reasonably designed to require monitoring of compliance with access and participation requirements. Rules proposed by the Board and adopted by the CFTC do not include a comparable provision. The Commission preliminarily believes this requirement is consistent with Exchange Act provisions requiring registered clearing agencies to have rules designed to not permit unfair discrimination in the admission of participants because it helps ensure that a covered clearing agency complies with its own membership requirements.

- In proposing Rule 17Ad-22(e)(19), the Commission would explicitly require a covered clearing agency's policies and procedures to be reasonably designed to require regular review of its tiered participation arrangements. Rules proposed by the Board and adopted by the CFTC do not include a comparable provision. The

⁶⁵⁹ For example, the Commission preliminarily believes that proposed Rule 17Ad-22(e)(23), requiring disclosure of rules, key procedures, and market data, contains the same substantive requirements as rules proposed by the Board and adopted by the CFTC. See proposed Reg. HH, *supra* note 53, at 3686-88, 3693 (the Board proposing Sec. 234.3(a)(23)); DCO Int'l Standards Release, *supra* note 53, at 72493-94, 72521 (CFTC adopting Sec. 39.37).

In this case, the Commission notes that regulators have taken slightly different approaches to achieving disclosure of rules, key procedures, and market data. The CFTC requires disclosure through the CPSS-IOSCO Disclosure Framework. See DCO Int'l Standards Release, *supra* note 53, at 72493-94, 72521 (CFTC adopting Sec. 39.37(a)); see also CPSS-IOSCO, Disclosure Framework for Financial Market Infrastructures (Apr. 2012), available at <http://www.bis.org/publ/cpss101c.pdf>. The Commission and the Board have proposed to require disclosure through a comprehensive public disclosure set forth in their proposed rules. The Commission preliminarily believes, however, that the three disclosure regimes impose the same substantive requirements.

⁶⁶⁰ See proposed Reg. HH, *supra* note 53, at 3677-78, 3691 (the Board proposing Sec. 234.3(a)(7)); DCO Int'l Standards Release, *supra* note 53, at 72487-91, 72518 (CFTC adopting Sec. 39.33(c)).

⁶⁶¹ See 17 CFR 39.16; proposed Reg. HH, *supra* note 53, at 3680-81, 3692 (the Board proposing Sec. 234.3(a)(13)); see also DCO Principles Release, *supra* note 53, at 69395-97, 69442 (CFTC adopting Sec. 39.16).

Commission preliminarily believes this requirement is consistent with Exchange Act provisions requiring registered clearing agencies to have rules designed to not permit unfair discrimination in the admission of participants because it helps ensure that a covered clearing agency periodically reconsiders whether in practice its membership requirements may result in either an inappropriately broad or narrow membership.

The following discussion provides examples of proposed rule provisions that are representative of the differences between the Commission's proposal and the Board's proposal and the CFTC's final rules, where the Commission is proposing requirements that are more general than those proposed by the Board or adopted by the CFTC:

- In proposing Rule 17Ad-22(e)(2), the Commission would not require a covered clearing agency's policies and procedures to be reasonably designed to include requirements for disclosure of board decisions, review of the performance of the board of directors and individual directors, documentation and disclosure of governance arrangements, procedures for managing conflicts of interests involving board members, and oversight of the risk function. Rules adopted by the CFTC include such requirements.⁶⁶² The Commission preliminarily believes that such requirements would in part be duplicative of existing Exchange Act requirements applicable to covered clearing agencies grounded in the broad definition of the term "rules of a clearing agency" in Section 3(a)(27) of the Exchange Act,⁶⁶³ and otherwise have been contemplated by the Commission's proposed Regulation MC.⁶⁶⁴ Accordingly any further requirements in this respect would be considered by the Commission separately.

- In proposing Rules 17Ad-22(e)(4) and (e)(7), the Commission would not require a covered clearing agency's policies and procedures for stress testing its financial resources and liquid resources, respectively, to cover specific stress scenarios, as rules adopted by the CFTC do.⁶⁶⁵ The Commission preliminarily believes it is appropriate to provide discretion to the covered

clearing agencies to identify the stress scenarios most appropriate for their needs given their status as SROs subject to the Commission's oversight, and to rely upon other tools available to the Commission through its supervisory and examination programs to ensure the responsibilities of covered clearing agencies in this regard are fulfilled.

- In proposing Rule 17Ad-22(e)(5), the Commission would not specifically require, as the CFTC does in its rules, a covered clearing agency's policies and procedures to be reasonably designed to (i) establish prudent valuation practices and develop haircuts that are tested regularly and take into account stressed market conditions (including to reduce the need for procyclical adjustments); (ii) avoid concentrated holdings of certain assets where it could significantly impair the ability to liquidate such assets quickly without significant adverse price effects; and (iii) use a collateral management system that is well designed and operationally flexible, such that it, among other things, accommodates changes in the ongoing monitoring and management of collateral; and (iv) allow for the timely valuation of collateral and execution of any collateral or margin calls.⁶⁶⁶ While the Commission preliminarily agrees that these requirements may facilitate prudent practices, the Commission preliminarily observes that consideration of these practices would fall within the general responsibilities of a covered clearing agency and its board of directors. The Commission therefore preliminarily believes that proposed Rule 17Ad-22(e)(5) strikes the appropriate balance in establishing policies and procedures requirements with respect to collateral management.

- In proposing Rule 17Ad-22(e)(6), the Commission also would not require a covered clearing agency's policies and procedures to be reasonably designed to determine the appropriate historic time period for the margin methodology based on the characteristics of each product, spread, account, or portfolio or to require specifying minimum liquidation periods for different types of derivatives. Rules adopted by the CFTC include such requirements.⁶⁶⁷ While the Commission preliminarily agrees that these requirements may facilitate prudent practices, the Commission preliminarily observes that consideration of these practices would fall within the general responsibilities of

a covered clearing agency and its board of directors. The Commission therefore preliminarily believes that proposed Rule 17Ad-22(e)(6) strikes the appropriate balance in establishing policies and procedures requirements with respect to risk management.

These differences between the Commission's proposal and the Board's proposed rules and the CFTC's final rules are provided here as examples of the differences observed between the respective rule sets and do not constitute an exhaustive list. In preliminarily formulating the specific requirements of the proposed rules in furtherance of Section 17A of the Exchange Act, the Commission was guided by its experience in supervising registered clearing agencies, including through the SRO rule filing process under Section 19(b) of the Exchange Act and Rule 19b-4, periodic inspections and examinations, and other monitoring of the activities of registered clearing agencies.⁶⁶⁸ The Commission also took into account the particular circumstances of the U.S. securities markets, including but not limited to business models of and current practices at covered clearing agencies, characteristics of the products cleared, the nature of the covered clearing agencies' participant base, and other factors. The Commission preliminarily believes the differences between its proposal and the Board's proposed rules and the CFTC's final rules are appropriate for the reasons noted above. The Commission further preliminarily notes that some of the differences between the Commission's proposal and the CFTC's final rules is attributable to differences between the scope of the Commission's and the CFTC's regulatory authority.⁶⁶⁹

Further, CPSS-IOSCO members are also in various stages of implementing the standards set forth in the PFMI Report into their own regulatory regimes, and the Commission preliminarily believes that proposing a set of requirements generally consistent with the relevant international standards would result in diminished likelihood that participants in cleared markets would restructure and operate

⁶⁶² See DCO Int'l Standards Release, *supra* note 53, at 72480-81, 72515 (CFTC adopting Sec. 39.30).

⁶⁶³ See 15 U.S.C. 78c(a)(27).

⁶⁶⁴ See *supra* note 111 (discussing rules for governance arrangements proposed by the Commission to, among other things, mitigate conflicts of interest at registered clearing agencies that provide CCP services for security-based swaps).

⁶⁶⁵ See DCO Int'l Standards Release, *supra* note 53, at 72492-93, 72520 (CFTC adopting Sec. 39.36(c)).

⁶⁶⁶ See 17 CFR 39.11, 39.13; see also DCO Principles Release, *supra* note 53 (CFTC adopting Secs. 39.11 and 39.13).

⁶⁶⁷ See 17 CFR 39.13(g)(2); see also DCO Principles Release, *supra* note 53, at 69364-79, 69438 (CFTC adopting Sec. 39.13(g)(2)).

⁶⁶⁸ See *supra* Part 0 and note 96 (describing the Commission's framework for regulation of SROs and the SRO rule filing process).

⁶⁶⁹ For example, the Commission is proposing Rules 17Ad-22(e)(11) and (12) to establish requirements for covered clearing agencies that provide CSD services and for exchange-of-value settlement systems. See *supra* Parts 0-0 and *infra* Part 0 (discussing the proposed rules and providing rule text, respectively). The CFTC has not proposed comparable rules because CSDs and securities settlement systems do not fall within the scope of its regulatory authority.

in less-regulated markets.⁶⁷⁰

Additionally, international standards such as the Basel III framework could create complications for U.S. clearing agencies not subject to regulations based on the standards set in the PFMI Report as a result of the Basel III framework's treatment of QCCPs. In particular, if U.S. clearing agencies do not obtain QCCP status from foreign banking regulators who have adopted rules conforming to the Basel III framework because, for instance, the regulatory framework is not consistent with the standards set forth in the PFMI Report, foreign bank members of U.S. clearing agencies may have incentives to move their clearing business to clearing agencies in jurisdictions where they might obtain lower capital requirements under the Basel III framework.⁶⁷¹

Failure to maintain consistency with other regulators may disrupt cleared markets in a number of ways. Significant differences across regulatory regimes may encourage participants to restructure their operations in order to avoid a particular regulatory regime.⁶⁷² Such differences may reduce the liquidity of cleared products in certain markets if they result in an undersupply of clearing services. Further, inconsistency in regulation across jurisdictions may increase the likelihood that restructuring by market participants in response such as inconsistency results in concentrating clearing activity in regimes with a weaker commitment to policies and procedures for sound risk management.

In the case of clearing agency standards, there are additional motivations for consistency with other regulatory requirements. The Commission preliminarily believes that such consistency would prevent the application of inconsistent regulatory burdens and thereby reduce the likelihood that participants in cleared markets would restructure and operate in less-regulated markets. Additionally,

such consistency would allow foreign bank clearing members and foreign bank customers of clearing members of covered clearing agencies to be subject to lower capital requirements under the Basel III framework.⁶⁷³

d. Concentration

The economic effects associated with the proposed rules may also be partially determined by the economic characteristics of clearing agencies. Generally, the economic characteristics of FMIs, including clearing agencies, include specialization, economies of scale, barriers to entry, and a limited number of competitors.⁶⁷⁴ Such characteristics, coupled with the particulars of an FMI's legal mandate, could result in market power, leading to lower levels of service, higher prices, and under-investment in risk management systems.⁶⁷⁵

The centralization of clearing activities in a relatively small number of clearing agencies somewhat insulated from market forces may result in a reduction in their incentives to innovate and to invest in the development of appropriate risk management practices on an ongoing basis, particularly when combined with the cost reduction pressures noted above in Part IV.A.⁶⁷⁶ However, the Commission notes that the inverse may not necessarily hold. In other words, additional competition in the market for clearing services may not necessarily result in improved risk management. For instance, aggressive price-cutting in a "race to the bottom" may result in clearing agencies accepting lower-quality collateral, requiring lower margin and default fund contributions, lowering access requirements, or holding lower reserves, potentially undermining their risk management efforts.⁶⁷⁷

Market power may raise particular issues with respect to the allocation of

benefits and costs flowing from these proposed rules and precipitate changes in the structure of the financial networks that are served by covered clearing agencies. For example, as a result of limited competition,⁶⁷⁸ existing covered clearing agencies may easily pass the incremental costs associated with enhanced standards on to their members, who may share these costs with their customers, potentially resulting in increased transaction costs in cleared securities.

If incremental increases in costs lead clearing agencies to charge higher prices for their services, then certain clearing members may choose to terminate membership and cease to clear transactions for their customers. Should this occur the result may be further concentration among clearing members, where each remaining member clears a higher volume of transactions. In this case, clearing agencies and the financial markets they serve would be more exposed to these larger clearing members. These remaining clearing members may, however, each internalize more of the costs their activity in cleared markets imposes on the financial system.

The increased importance of a small set of clearing members, in turn, may result in firms not previously systemically important increasing in systemic importance. This is particularly true for clearing members that participate in multiple markets, both cleared and not cleared.⁶⁷⁹ However, adequate regulation of capital levels and margin amounts at surviving clearing members could mean that, though shocks to these members may be

⁶⁷⁰ See *supra* note 53 (citing the Board's proposal and the CFTC's final rules).

⁶⁷¹ See *supra* note 48 and *infra* Part 0 (discussing the Basel III capital requirements and the economic effect of QCCP status under the Basel III capital requirements, respectively).

⁶⁷² See, e.g., Arnoud W.A. Boot, Silva Dezoblan, & Todd T. Milbourn, Regulatory Distortions in a Competitive Financial Services Industry, 16 J. Fin. Serv. Res. 249 (2000) (showing that, in a simple industrial organization model of bank lending, a change in the cost of capital resulting from regulation results in a greater loss of profits when regulated banks face competition from non-regulated banks than when regulations apply equally to all competitors); Victor Fleischer, Regulatory Arbitrage, 89 Tex. L. Rev. 227 (2010) (discussing how, when certain firms are able to choose their regulatory structure, regulatory costs are shifted onto those entities that cannot engage in regulatory arbitrage).

⁶⁷³ See Basel III capital requirements, *supra* note 48.

⁶⁷⁴ See *supra* note 49 (defining "financial market infrastructure").

⁶⁷⁵ Cf. PFMI Report, *supra* note 1, at 11.

⁶⁷⁶ Kenneth J. Arrow, Economic Welfare and the Allocation of Resources for Invention 609–626, in *The Rate and Direction of Inventive Activity: Economic and Social Factors* (NBER, 1962), available at <http://www.nber.org/chapters/c2144.pdf>.

⁶⁷⁷ See CPSS, Market Structure Development in the Clearing Industry: Implications for Financial Stability, at sec. 5 (Nov. 2010), available at <http://www.bis.org/publ/cpss92.pdf>; see also Siyi Zhu, Is There a 'Race to the Bottom' in Central Counterparties Competition?—Evidence from LCH.Clearnet SA, EMCF and EuroCCP, DNB Occasional Studies, Vol. 9, No. 6 (2011); John Kiff et al., Credit Derivatives: Systemic Risks and Policy Options (IMF Working Paper No. 254, Nov. 2009), available at <http://www.imf.org/external/pubs/ft/wp/2009/wp09254.pdf>.

⁶⁷⁸ See generally Nadia Linciano, Giovanni Siciliano & Gianfranco Trovatore, The Clearing and Settlement Industry: Structure Competition and Regulatory Issues (Italian Secs. & Exch. Comm'n Research Paper 58, May 2005), available at <http://www.ssrn.com/abstract=777508> (concluding in part that the core services offered by the clearance and settlement industry tend toward natural monopolies because the industry can be characterized as a network industry, where consumers buy systems rather than single goods, consumption externalities exist, costs lock-in consumers once they choose a system, and production improves with economies of scale); Heiko Schmiedel, Markku Malkamäki & Juha Tarkka, Economies of Scale and Technological Development in Securities Depository and Settlement Systems, at 10 (Bank of Fin. Discussion Paper 26, Oct. 2002), available at <http://www.suomenpankki.fi/en/julkaisut/tutkimukset/keskustelualoitteet/Documents/0226.pdf> ("The overall results of this study reveal the existence of substantial economies of scale among depository and settlement institutions. On average, the centralized U.S. system is found to be the most cost effective settlement system and may act as the cost saving benchmark.").

⁶⁷⁹ See, e.g., Roe, *supra* note 172 (arguing that counterparty risk concentrated within CCPs may be transferred to the broader financial system through links between clearing members and their clients).

larger, the propagation of shocks may be limited to a smaller set of entities and their equity holders.

e. Qualifying CCP Status and Externalities on Clearing Members

An effect of the proposed amendments to Rule 17Ad-22 is that covered clearing agencies required to comply with the proposed rules may be more likely to qualify as QCCPs in non-U.S. jurisdictions that have adopted the Basel III framework's QCCP definition. Under the Basel III framework, a QCCP is defined as an entity operating as a CCP that is prudentially supervised in a jurisdiction where the relevant regulator has established, and publicly indicated that it applies to the CCP on an ongoing basis, domestic rules and regulations that are consistent with the standards set forth in the PFMI Report.⁶⁸⁰ Because the proposed amendments to Rule 17Ad-22 are intended to be in line with the standards set forth in the PFMI Report, the Commission preliminarily believes that foreign bank clearing members of certain covered clearing agencies and foreign banks clearing indirectly through clearing members of covered clearing agencies may benefit from covered clearing agencies obtaining QCCP status. In particular, bank clearing members and bank indirect participants of covered clearing agencies that could attain QCCP status would face lower capital requirements with respect to cleared derivatives and repurchase agreement transactions because, under the Basel III framework, capital requirements for bank exposures to QCCPs are lower than capital requirements for bank exposures to non-qualifying CCPs for these products. Although the Board and the Office of the Comptroller of the Currency have already adopted rules implementing the Basel III capital requirements that would identify all covered clearing agencies (with the exception of ICEEU) as QCCPs for the purposes of applying risk weights to assets at U.S. banks,⁶⁸¹ the proposed amendments to Rule 17Ad-22 may result in non-U.S. bank clearing members experiencing lower capital requirements related to exposures against covered clearing agencies relative to a baseline scenario in which foreign banking regulators do not determine that a covered clearing agency is a QCCP.⁶⁸²

The Basel III framework affects capital requirements for bank exposures to central counterparties in two important ways. The first relates to trade exposures, defined under the Basel III capital requirements as the current and potential future exposure of a clearing member or indirect participant in a CCP arising from OTC derivatives, exchange-traded derivatives transactions, and securities financing transactions. If these exposures are held against a QCCP, they will be assigned a risk weight of 2%. In contrast, exposures against non-qualifying CCPs do not receive lower capital requirements relative to bilateral exposures and are assigned risk weights between 20% and 100%, depending on counterparty credit risk. Second, the Basel III capital requirements impose a cap on risk weights applied to default fund contributions, limiting risk-weighted assets (subject to a 1250% risk weight) to a cap of 20% of a clearing member's trade exposures against a QCCP. This is in contrast to treatment of exposures against non-qualifying CCPs, which are uncapped and subject to a 1250% risk weight. Because QCCP status generally impacts capital treatment, any benefits of attaining QCCP status will likely accrue, at least in part, to foreign clearing members or foreign indirect participants subject to the Basel III capital requirements.⁶⁸³ As a result of lower risk weights applied to exposures and a cap on capital requirements against default fund obligations, clearing members of QCCPs subject to Basel III capital requirements may experience an improved capital position relative to bank members of non-QCCPs. This may lower the costs of debt capital for bank members of QCCPs.⁶⁸⁴

Non-U.S. banks that are constrained by Basel III tier one capital requirements would face a shock to risk-weighted assets once capital rules come into force.⁶⁸⁵ The size of the shock depends on regulators' determinations with regard to QCCP status. Regardless of the

size of the shock and in order to come into compliance with capital rules, however, affected banks will have to raise capital or reduce leverage. In the absence of perfect markets, these banks may incur ongoing costs as a result.

In quantifying the benefits of achieving QCCP status, the Commission based its estimate on publicly available information with regard to OCC.⁶⁸⁶ To estimate the upper bound for the potential benefits accruing to bank clearing members at OCC as a result of QCCP status, the Commission identified a sample of 20 bank clearing members at OCC and, for each bank, collected information about total assets, risk weighted assets, net income and tier one capital ratio at the holding company level for 2012.⁶⁸⁷ The Commission then allocated trade exposures and default fund exposures across the sample of bank clearing members based on the level of risk-weighted assets.⁶⁸⁸ The Commission measured the impact on risk-weighted assets for non-U.S. bank clearing members under two different capital treatment regimes. The first regime is in the absence of QCCP status, assuming a 100% risk weight applied to trade exposures and 1250% risk weight applied to default fund exposures for non-U.S. members. In the second regime, OCC obtains QCCP status, and banks are allowed to apply a 2% risk

⁶⁸⁶ Under the Basel III framework ICEEU and FICC's repurchase agreement segment would also be eligible for QCCP status. However, FICC does not report counterparties to repo agreements, and ICEEU does not separately report exposures related to security-based swap clearing, so we are currently unable to quantify potential benefits related to QCCP status for these entities.

⁶⁸⁷ The Commission used the set of entities it identified as banks on OCC's member list, available at <http://www.optionsclearing.com/membership/member-information/>. For U.S. bank holding companies, 2012 total assets, risk weighted assets, net income, and tier 1 capital ratios were collected from Y-9C reports available at the National Information Center, <http://www.ffiec.gov/nicpubweb/nicweb/nichome.aspx>. For non-U.S. bank holding companies, Commission staff obtained corresponding data from financial statements and supplementary financial materials posted to bank Web sites. Where necessary, values were converted back to U.S. dollars at appropriate exchange rates obtained from Thomson Reuters Datastream and the Federal Reserve, <http://www.federalreserve.gov/releases/h10/hist/>.

⁶⁸⁸ For example, one bank in the sample, with 6.25% of total risk-weighted assets, was assigned 6.25% of the total trade and default fund exposures while another bank in the sample, with 3.43% of total risk weighted assets, was assigned 3.43% of these exposures. Because trade exposures of OCC members against OCC are nonpublic, the Commission used the balance of OCC margin deposits and deposits in lieu of margin held at OCC, \$57.48 billion, as a proxy for trade exposures. OCC's 2012 clearing fund deposits were valued at \$2.66 billion. See OCC, 2012 Annual Report, available at http://www.optionsclearing.com/components/docs/about/annual-reports/occ_2012_annual_report.pdf.

⁶⁸⁰ See *supra* note 48 (discussing the Basel III capital requirements).

⁶⁸¹ See *infra* Part 0.

⁶⁸² The Commission notes that benefits to banks that may arise as a result of the proposed rules may be contingent upon regulators in other jurisdictions taking action to recognize the QCCP status of covered clearing agencies.

⁶⁸³ For a discussion of the effects of QCCP status on competition between bank and non-bank clearing members, see Part 0.

⁶⁸⁴ See *supra* note 593 (noting that the Commission currently expects the lower capital treatment under the Basel III framework to affect registered clearing agencies FICC, ICEEU, and OCC, each of which would meet the definition of a "covered clearing agency" under the proposed rules).

⁶⁸⁵ As discussed above, the Board and Office of Comptroller of the Currency have adopted rules implementing capital requirements under Basel III that make capital treatment for exposures to CCPs independent of the proposed rules for U.S. banks regulated by these two agencies, and therefore the Commission preliminarily believes no benefits would accrue to U.S. bank clearing members of FICC and OCC.

weight applied to trade exposures and a 1250% risk weight to default fund exposures up to a total exposure cap of 20% of trade exposures.⁶⁸⁹ If OCC is determined to be a QCCP, then the increase in risk weighted assets will be smaller in magnitude, implying a smaller adjustment at lower cost. The Commission preliminarily estimates that benefits associated with OCC obtaining QCCP status stemming from lower capital requirements against trade exposures to QCCPs as a result of the proposed rules to have an upper bound of \$600 million per year, or approximately 0.60% of the total 2012 net income reported by bank clearing members at OCC.

The Commission's analysis is limited in several respects and relies on several assumptions. First, a limitation of our proxy for trade exposures and our use of OCC's clearing fund is that the account balances include deposits by bank clearing members, who would experience lower capital requirements under the Basel III framework, and non-bank clearing members who would not. The Commission preliminarily assumes, for the purposes of establishing an upper bound for the benefits to market participants that are associated with QCCP status for OCC under the proposed rules, that the balance of both OCC's margin account and OCC's default fund are attributable only to bank clearing members. Additionally, we assume an extreme case where, in the absence of QCCP status, trade exposures against a CCP would be assigned a 100% risk weight, causing the largest possible shock to risk-weighted assets for affected banks.

Concluding that lower capital requirements on trade exposures to OCC would produce effects in the real economy also requires that certain conditions exist. Agency problems, taxes, or other capital market imperfections could result in banks targeting a particular capital structure. Further, capital constraints on bank clearing members subject to the Basel III framework should bind so that higher capital requirements on bank clearing members subject to the Basel III framework in the absence of QCCP

status would cause these banks to exceed capital constraints if they chose to redistribute capital to shareholders or invest capital in projects with returns that exceed their cost of capital. Using publically available data, however, it is not currently possible to determine whether capital constraints will bind for bank clearing members when rules applying Basel III capital requirements come into force, so to estimate an upper bound for the effects of QCCP status on bank clearing members we assume that tier one capital constraints for all bank clearing members of OCC would bind in an environment with zero weight placed on bank exposures to CCPs.⁶⁹⁰

For the purposes of quantifying potential benefits from QCCP status, the Commission has also assumed that banks choose to adjust to new capital requirements by deleveraging. In particular, the Commission assumed that banks would respond by reducing risk-weighted assets equally across all risk classes until they reach the minimum tier one capital ratio under the Basel framework of 8.5%. We measure the ongoing costs to each non-U.S. bank by multiplying the implied change in total assets by each bank's return on assets, estimated using up to 12 years of annual financial statement data.⁶⁹¹

The Basel III capital requirements for exposures to CCPs yield additional benefits for QCCPs that the Commission is currently unable to quantify due to lack of data concerning client clearing arrangements by banks. For client exposures to clearing members, the Basel III capital requirements allow participants to reflect the shorter close-out period of cleared transactions in their capitalized exposures. The Basel III framework's treatment of exposures to CCPs also applies to client exposures to CCPs through clearing members. This may increase the likelihood that bank clients of bank clearing members that are subject to the Basel III capital requirements share some of the benefits of QCCP status.

⁶⁹⁰ The Commission notes that, at present, no bank in its sample of bank clearing members of OCC is bound by capital requirements under the Basel III framework. Bank holding company risk-weighted assets, adjusted total assets, and capital ratio data have been taken from <http://www2.fdic.gov/SDI/>. The Commission used data from 2009–2012 for its sample of bank clearing members and assumed no bank-specific countercyclical capital buffers for these banks. This suggests a minimum tier 1 capital ratio of 9.6%, exceeding the Basel III minimum by 1.1%. The same analysis suggests a minimum total capital ratio of 12.3%, exceeding the Basel III minimum by 1.8%.

⁶⁹¹ This data has been taken from Compustat. Due to data limitations, for certain banks a shorter window was used for this calculation. The minimum sample window was nine years.

Furthermore, the fact that the Basel III capital requirements apply to bank clearing members may have important implications for competition and concentration. While the proposed rules may extend lower capital requirements against exposures to CCPs to non-U.S. bank clearing members of covered clearing agencies,⁶⁹² the benefits of QCCP status will still be limited to bank clearing members. However, the costs associated with compliance with the proposed rules may be borne by all clearing members, regardless of whether or not they are supervised as banks. A potential consequence of this allocation of costs and benefits may be “crowding out” of members of QCCPs that are not banks and will not experience benefits with respect to the Basel III framework. This may result in an unintended consequence of increased concentration of clearing activity among bank clearing members. As noted in Part IV.C.1.d, this increased concentration could mean that each remaining clearing member becomes more important from the standpoint of systemic risk transmission.

In addition to benefits for bank clearing members, certain benefits resulting from QCCP status may also accrue to covered clearing agencies. If banks value lower capital requirements attributable to QCCP status, bank clearing members may prefer membership at QCCPs to membership at CCPs that are not QCCPs. A flight of clearing members from covered clearing agencies in the absence of QCCP status would result in default-related losses being mutualized across a narrower member base. If the flight from covered clearing agencies results in lower transactional volume at these clearing agencies, then economies of scale may be lost, resulting in higher clearing fees and higher transaction costs in cleared products.

2. Effect on Competition, Efficiency, and Capital Formation

The proposed amendments to Rule 17Ad–22 and proposed Rule 17Ab2–2 have the potential to affect competition, efficiency, and capital formation. As with the rest of the benefits and costs associated with the proposed amendments to Rule 17Ad–22, the Commission preliminarily believes that several of the effects described below only occur to the extent that covered clearing agencies do not already have operations and governance mechanisms

⁶⁹² See *supra* note 599 and accompanying text (noting that banks supervised by the Board and the Office of the Comptroller of the Currency would treat covered clearing agencies as QCCPs for the purposes of calculating regulatory capital ratios).

⁶⁸⁹ The Basel III framework allows banks to compute default fund exposures in two ways. Method 1 involves computing capital requirements for each member proportional to its share of an aggregate capital requirement for all clearing members in a scenario where to average clearing members default. The Commission currently lacks data necessary to compute default fund exposures under this approach, instead we use Method 2, which caps overall exposure to a QCCP at 20% of trade exposures. See Basel III framework, *supra* note 48, Annex 4, paras. 121–25 (outlining two methods for computing default fund exposures).

that conform to the requirements in proposed Rule 17Ad-22(e). Additionally, the Commission preliminarily believes that consistency with international regulatory frameworks, as embodied by the standards set forth in the PFMI Report, which may promote the integrity of cleared markets, could have substantial effects on competition, efficiency, and capital formation.

a. Competition

Two important characteristics of the market for clearance and settlement services are high fixed costs and economies of scale. Large investments in risk management and information technology infrastructure costs, such as financial data database and network maintenance expenses, are components of high fixed costs for clearing agencies. Consequently, the clearance and settlement industry exhibits economies of scale in that the average total cost per transaction, which includes fixed costs, diminishes with the increase in transaction volume as high fixed costs are spread over a larger number of transactions.

Furthermore, high fixed costs translate into barriers to entry that preclude competition. Lower competition is an important source of market power for clearing agencies. As a result, clearing agencies possess the ability to exert market power and influence the fees charged for clearance and settlement services in the markets they serve.⁶⁹³ Any costs resulting from the proposed amendments may have the effect of raising already high barriers to entry. As the potential entry of new clearing agencies becomes more remote, existing clearing agencies may be able to reduce service quality, restrict the supply of services, or increase fees above marginal cost in an effort to earn economic rents from participants in cleared markets.⁶⁹⁴

Even if they could not take advantage of a marginal increase in market power, clearing agencies may use their market power to pass any increases in costs that flow from the proposed amendments to their members. This may be especially true in the cases of member-owned clearing agencies, such as DTC, FICC, NSCC, and OCC, where members lack the opportunity to pass costs through to outside equity holders. Allowing clearing members to serve on the board of directors of a covered clearing agency may align a covered clearing agency's

incentives with its membership. Certain complications may also arise, however, when clearing members sit on boards of covered clearing agencies as members of the board and may choose to allocate the costs of enhanced risk management inefficiently across potential competitors, in an effort to reduce their own share of these costs.

Members who are forced to internalize the costs of additional requirements under the proposed rules may seek to terminate their membership. Additionally, prospective clearing members may find it difficult to join clearing agencies, given the additional costs they must internalize.⁶⁹⁵ Remaining clearing members may gain market power as a result, enabling them to extract economic rents from their customers. Rent extraction could take the form of higher transaction costs in cleared markets, thereby reducing efficiency, as discussed below.

The Commission also acknowledges that proposed Rule 17Ad-22(e)(19) may affect competition among firms that choose to become clearing members, and those who provide clearing services indirectly, through a clearing member. Monitoring and managing the risks associated with indirect participation in clearing may be costly. If monitoring and managing the risks associated with indirect participation in clearing proves costly for clearing agencies and if clearing agencies are able to pass the additional costs related to monitoring and managing risks to clearing members, it may cause marginal clearing members unable to absorb these additional costs to exit. While these exits may be socially efficient, since they reflect the internalization of costs otherwise imposed upon other participants in cleared markets through increased probability of clearing agency default, they may nevertheless result in lower competition among clearing members for market share, potentially providing additional market power to the clearing members that remain.

The Commission preliminarily believes, however, that management of risks from indirect participation is important in mitigating the risks that clearing agencies pose to financial stability. The tiered participation risk exposures, including credit, liquidity, and operational risks inherent in indirect participation arrangements, may present risks to clearing agencies, their members, and to the broader financial markets. For instance, if the

size of an indirect participant's positions is large relative to a clearing member's capacity to absorb risks, this may increase the clearing member's default risk. Consequently, a clearing agency with indirect participation arrangements may be exposed to the credit risk of an indirect participant through its clearing members. Similarly, a margin call on, or a default by, an indirect participant could constrain liquidity of its associated clearing members, making it more difficult for these members to manage their positions at the clearing agency.

The consistency across regulatory frameworks contemplated by the proposed rules may also affect competition. Financial markets in cleared products are global, encompassing many countries and regulatory jurisdictions. Consistency with international regulatory frameworks may facilitate entry of clearing agencies into new markets. By contrast, conflicting or duplicative regulation across jurisdictions, or even within jurisdictions, may cause competitive friction that inhibits entry and helps clearing agencies behave like local monopolists. Consistency in regulation can facilitate competition among clearing agencies so long as regulation is not so costly as to discourage participation in any market. Additionally, the Commission preliminarily believes that proposed Rule 17Ad-22(e)(23) may facilitate competition among clearing agencies across jurisdictions by requiring public disclosures that enable market participants to compare clearing agencies more easily.

The consistency across regulatory requirements contemplated by the proposed rules may affect competition among banks in particular. Clearing derivative and repurchase agreement transactions through QCCPs will result in lower capital requirements for banks under the Basel III capital requirements. Therefore, consistency with the standards set forth in the PFMI Report may allow banks that clear these products through covered clearing agencies to compete on equal terms with banks that clear through other clearing agencies accorded QCCP status. This effect potentially countervails higher barriers to entry that enhanced risk management standards may impose on clearing members by lowering the marginal cost of clearing these transactions. Furthermore, covered clearing agencies potentially compete with one another for volume from clearing members. Since clearing members receive better treatment for exposures against QCCPs, clearing

⁶⁹³ See, e.g., Clearing Agency Standards Release, *supra* note 5, at 66263.

⁶⁹⁴ See, e.g., Clearing Agency Standards Release, *supra* note 5, at 66263 n.481.

⁶⁹⁵ See *supra* Part 0 (discussing concentration both in the market for clearing services and among clearing members).

members will find it less costly to deal with QCCPs. Failure to establish requirements consistent with the standards set forth in the PFMI Report may place U.S. covered clearing agencies at a competitive disadvantage globally.

The ability of covered clearing agencies to obtain QCCP status may also affect competition among clearing agencies. Under the Basel III framework, QCCP status would have practical relevance only for covered clearing agencies providing CCP services for derivatives, security-based swaps, and securities financing transactions. To the extent that the proposed rules increase the likelihood that banking regulators that have implemented the Basel III framework in their jurisdiction recognize covered clearing agencies as QCCPs, banks that clear at covered clearing agencies will experience lower capital requirements. Since clearing agencies may compete for volume from clearing members that are also banks, the proposed rules may remove a competitive friction between covered clearing agencies and other clearing agencies that enjoy recognition as QCCPs by banking regulators. As a corollary, the proposed rules could potentially disadvantage any registered clearing agencies that are not covered clearing agencies.⁶⁹⁶ The Commission also preliminarily notes that the ability of registered clearing agencies to voluntarily apply for covered clearing agency status under proposed Rule 17Ab2-2(a) may potentially allow entrants to achieve QCCP status if the Commission determines they should receive covered clearing agency status and they otherwise meet the requirements of the Basel III framework.

Further competitive effects may flow from the proposal as a result of the determinations under proposed Rule 17Ab2-2 for clearing agencies engaged in activities with a more complex risk profile and clearing agencies that are systemically important in multiple jurisdictions. These entities will be responsible for maintaining additional financial resources sufficient to cover the default of the two participant families that would potentially cause the largest aggregate credit exposures in extreme but plausible market conditions as well as undertake an annual feasibility analysis for extending liquidity risk management from “cover

one” to “cover two.” These clearing agencies will have to collect these resources from participants, either through higher margin requirements or guaranty fund contributions, or indirectly through third-party borrowing arrangements secured by member resources. Regardless of how clearing agencies obtain these additional resources, the requirement to do so potentially raises the costs to use services provided by covered clearing agencies which could, at the margin, shift transactional volume to clearing agencies that fall outside the scope determined by proposed Rule 17Ab2-2, where competing clearing agencies exist, or opt out of clearing altogether.

b. Efficiency

The proposed amendments to Rule 17Ad-22 may affect efficiency in a number of ways, though as discussed previously, most of these effects will only flow to the extent that covered clearing agencies do not already comply with the proposed amendments. First, because the proposed amendments result in general consistency with the standards set forth in the PFMI Report and requirements proposed by the Board and adopted by the CFTC, consistency likely fosters efficiency by reducing the risk that covered clearing agencies will be faced with conflicting or duplicative regulation when clearing financial products across multiple regulatory jurisdictions.

Consistency across regulatory regimes in multiple markets may also result in efficiency improvements. Fully integrated markets would allow clearing agencies to more easily exploit economies of scale because clearing agencies tend to have low marginal costs and, thus, could provide clearance and settlement services over a larger volume of transactions at a lower average cost. Differences in regulation, on the other hand, may result in market fragmentation, allowing clearing agencies to operate as local monopolists. The resulting potential for segmentation of clearing and settlement businesses along jurisdictional lines may lead to overinvestment in the provision of clearing services and reductions in efficiency as clearing agencies open and operate solely within jurisdictional boundaries. If market segmentation precludes covered clearing agencies from clearing transactions for customers located in another jurisdiction with a market too small to support a local clearing agency, fragmentation may result in under-provisioning of clearing and settlement services in these areas, in turn reducing the efficiency with which market participants share risk.

The proposed amendments may also affect efficiency directly if they mitigate covered clearing agencies’ incentives to underinvest in risk management and recovery and wind-down procedures. CCP default and liquidation is likely a costly event, so to the extent that the proposed rules mitigate the risk of CCP default and prescribe rules for orderly recovery and wind-down, they will produce efficiency benefits. Another direct effect on efficiency may come if registered clearing agencies attempt to restructure their operations in ways that would allow them to fall outside of the scope of proposed Rule 17Ad-22(e).

Finally, price efficiency and the efficiency of risk sharing among market participants may be affected by the proposed amendments. On one hand, the cost of a transaction includes costs related to counterparty default that are typically unrelated to fundamental asset payoffs. Academic research using credit default swap transaction data has revealed a statistically significant, though economically small, relationship between the credit risk of a counterparty and the spreads implicit in transaction prices.⁶⁹⁷ Enhanced risk management by clearing agencies may reduce this component of transaction costs. By reducing deviations of prices from fundamental value, the proposed amendments may increase price efficiency. If lower transaction costs or reduced ambiguity facilitates participation in cleared markets by investors who would benefit from opportunities for risk-sharing in these markets,⁶⁹⁸ then this transmission channel may result in more efficient allocation of risk. On the other hand, the proposed amendments may have adverse implications for price efficiency in cleared markets if they drive up transaction costs as higher costs of risk management enter asset prices. An increase in transaction costs could cause certain market participants to avoid trading altogether, reducing liquidity in

⁶⁹⁷ See e.g., Navneet Arora, Priyank Gandhi & Francis Longstaff, Counterparty Credit Risk and the Credit Default Swap Market, 103 J. Fin. Econ. 280 (2012). Using transaction prices and quotes by 14 different CDS dealers, the authors identified how dealers’ credit risk affects transaction prices. They observed a relationship between spreads and credit risk implying that a 645-basis-point increase in a dealer’s credit spread would produce a one-basis-point increase in transaction prices. They explain the magnitude of this relationship by noting that their sample included transactions that were mostly collateralized, which would diminish the sensitivity of transaction prices to counterparty credit risk.

⁶⁹⁸ If investors who might benefit from risk-sharing in cleared markets are ambiguity-averse, then regulation that addresses payoffs in times of financial strain may induce their participation. See *supra* note 655 and accompanying text.

⁶⁹⁶ See *supra* note 593 (noting that the Commission currently expects the lower capital treatment under the Basel III framework to affect registered clearing agencies FICC, ICEEU, and OCC, each of which would meet the definition of a “covered clearing agency” under the proposed rules).

cleared products and opportunities for risk sharing among investors in these markets.

c. Capital Formation

The implications for capital formation that flow from these proposed rules stem mainly from incremental costs that result from compliance with more specific standards and benefits in the form of more efficient risk sharing.

In cases where current practice falls short of the proposed amendments, covered clearing agencies may have to invest in infrastructure or make other expenditures to come into compliance, which may divert capital from other uses. In line with our previous discussion of cost allocation in the market for clearing services, these resources may come from clearing members and their customers.⁶⁹⁹

At the same time, the Commission preliminarily believes that the standards contemplated under the proposed rules may foster capital formation. As mentioned earlier, clearing agencies that are less prone to failure may help reduce transaction costs in the markets they clear.⁷⁰⁰ Conceptually, the component of transaction costs that reflects counterparty credit risk insures one counterparty against the default of another.⁷⁰¹ Reductions in counterparty default risk allow the corresponding portion of transaction costs to be allocated to more productive uses by market participants who otherwise would bear these costs.

If, on balance, the proposed amendments cause transaction costs to decrease in cleared markets, then the expected value of trade may increase. Counterparties that are better able to diversify risk through participation in cleared markets may be more willing to invest in the real economy rather than choosing to engage in precautionary savings.

3. Effect of Proposed Amendments to Rule 17Ad-22 and Proposed Rule 17Ab2-2

The discussion below outlines the costs and benefits preliminarily considered by the Commission as they relate to the rules being proposed today. These specific costs and benefits are in addition to the more general costs and benefits anticipated under the Commission's proposal discussed in Part IV.C.1 and include, in particular,

the costs and benefits stemming from the availability of QCCP status under the Basel III capital requirements. Many of the costs and benefits discussed below are difficult to quantify. This is particularly true where clearing agency practices are anticipated to evolve and adapt to changes in technology and other market developments. The difficulty in quantifying costs and benefits of the proposed rules is further exacerbated by the fact that in some cases the Commission lacks information regarding the specific practices of clearing agencies that could assist in quantifying certain costs. For example, as noted in Part IV.C.3.a.iv(4), without detailed information about the composition of illiquid assets held by clearing agencies and their members, the Commission cannot provide reasonable estimates of costs associated with satisfying substantive requirements under proposed Rules 17Ad-22(e)(7)(i) and (ii). Another example, discussed in Part IV.C.3.a.iv(5), is testing and validation of financial risk models, where the Commission is only able to estimate that costs will fall within a range. In this case, the costs associated with substantive requirements under the proposed rules may depend on the types of risk models employed by clearing agencies, which are, in turn, dictated by the markets they serve. As a result, much of the discussion is qualitative in nature, though where possible, the costs and benefits have been quantified.

a. Proposed Rule 17Ad-22(e)

The Commission recognizes that the scope of the proposed rules is an important determinant of their economic effect. Having considered the anticipated costs associated with the proposed rules, the Commission preliminarily believes that it is appropriate to limit the application of proposed Rule 17Ad-22(e) to covered clearing agencies, as these are the registered clearing agencies for which the benefits of the proposed rules are the greatest. In particular, as discussed below, the Commission preliminarily believes that an important benefit resulting from the enhanced risk management requirements in the proposed rules is a reduction in the risk of a failure of a covered clearing agency. For example, for designated clearing agencies these benefits may be significant due to their size, exposure to, and interconnectedness with market participants, and the effect their failure may have on markets, market participants, and the broader financial system. For complex risk profile clearing agencies, significant benefits

may flow as a result of their higher baseline default risk.

As an alternative, the Commission could have proposed to extend the scope of proposed Rule 17Ad-22(e) to cover all registered clearing agencies. The Commission preliminarily acknowledges, however, that costs of compliance with the proposed rules may represent barriers to entry for clearing agencies. By continuing to apply Rule 17Ad-22(d) to registered clearing agencies that are not covered clearing agencies, the Commission preliminarily believes that the proposed scope Rule 17Ad-22(e) appropriately preserves the potential for innovation in the establishment and operation of registered clearing agencies.⁷⁰² Moreover, including CME and ICE in the set of covered clearing agencies would potentially subject them to requirements that would be duplicative of CFTC requirements.

i. Proposed Rule 17Ad-22(e)(1): Legal Risk

Because, as noted above, proposed Rule 17Ad-22(e)(1) would require substantially the same set of policies and procedures as Rule 17Ad-22(d)(1),⁷⁰³ the Commission preliminarily believes that proposed Rule 17Ad-22(e)(1) would likely impose limited material additional costs on covered clearing agencies and produce limited benefits, in line with the general economic considerations discussed in Part IV.C.1.

ii. Proposed Rule 17Ad-22(e)(2): Governance

Each covered clearing agency has a board of directors that governs its operations and oversees its senior management. Proposed Rule 17Ad-22(e)(2) would establish more detailed requirements for governance arrangements at covered clearing agencies relative to those imposed on

⁷⁰² The Commission notes that under proposed Rule 17Ab2-2(a), a registered clearing agency that is not involved in activities with a more complex risk profile and is not a designated clearing agency may apply for covered clearing agency status, which would subject them to the requirements of Rule 17Ad-22(e). The Commission preliminarily believes that this may occur if the registered clearing agency believes such status may credibly signal the quality of the services it provides or if it is seeking to obtain QCCP status under the Basel III framework.

⁷⁰³ See *supra* note 107; *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad-22(e)(1)); *supra* Part 0 (discussing current practices among registered clearing agencies regarding legal risk); see also 17 CFR 240.17Ad-22(d)(1).

⁶⁹⁹ See *supra* Part 0 (discussing the economic effects of the proposed rules on the market for clearing services generally).

⁷⁰⁰ See *supra* Part 0 (discussing the general economic effects of the proposed rules on systemic risk).

⁷⁰¹ See *supra* note 697.

registered clearing agencies under Rule 17Ad-22(d)(8).⁷⁰⁴

The Commission understands that any covered clearing agency subject to the proposed rule has policies and procedures in place that clearly prioritize the risk management and efficiency of the clearing agency. However, the Commission preliminarily believes that covered clearing agencies do not already have in place policies and procedures with respect to other requirements under proposed Rule 17Ad-22(e)(2). Based on its supervisory experience, the Commission preliminarily believes that some covered clearing agencies may need to update their policies and procedures to comply with proposed Rule 17Ad-22(e)(2)(iv). These updates will entail certain basic compliance costs, and covered clearing agencies may also incur assessment costs related to analyzing current governance arrangements in order to determine the extent to determine which they do not meet the requirements of the proposed amendments. The estimated costs in terms of paperwork are discussed in Part III.D.1. If, as a result of new policies and procedures, a covered clearing agency is required to recruit new directors, the Commission preliminarily estimates a cost per director of \$73,000.⁷⁰⁵

While there are potential costs associated with compliance, the Commission preliminarily believes that benefits would potentially accrue from these requirements. Specifically, the Commission preliminarily believes that enhanced governance arrangements would further promote safety and efficiency at the clearing agency—motives that may not be part of a clearing agency's governance arrangements in the absence of regulation. Policies and procedures required under the proposed rules would also reinforce governance arrangements at covered clearing agencies by requiring board members and senior management to have appropriate experience and skills to discharge their duties and responsibilities.

⁷⁰⁴ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad-22(e)(2) and its relationship to Rule 17Ad-22(d)(8)); see also *supra* note 119 (discussing how the proposed rule would complement other proposed requirements concerning governance at clearing agencies that may apply separately).

⁷⁰⁵ The Commission estimated a cost per director of \$68,000 in proposing Regulation MC. See Exchange Act Release No. 34-63107 (Oct. 14, 2010), 75 FR 65881, 65921 & n.215 (Oct. 26, 2010). The \$73,000 estimate reflects this amount in 2013 dollars, using consumer price inflation data provided by the Bureau of Labor Statistics.

Compliance with these proposed requirements could reduce the risk that insufficient internal controls within a covered clearing agency endanger broader financial stability. While the benefits of compliance are difficult to quantify, the Commission preliminarily believes that they flow predominantly from a reduced probability of covered clearing agency default.

iii. Proposed Rule 17Ad-22(e)(3): Comprehensive Framework for the Management of Risks

The Commission preliminarily believes that proposed Rule 17Ad-22(e)(3) would aid covered clearing agencies in implementing a systematic process to examine risks and assess the probability and impact of those risks.⁷⁰⁶ Proposed Rule 17Ad-22(e)(3)(i) specifies that a risk management framework include policies and procedures reasonably designed to identify, measure, monitor, and manage the range of risks that arise in or are borne by the covered clearing agency. Critically, these policies and procedures would be subject to review on a specified basis and approval by the board of directors annually. A sound framework for comprehensive risk management under regular review would have the benefits of providing covered clearing agencies with a better awareness of the totality of risks they face in the dynamic markets they serve. In addition, the requirement to have policies and procedures that provide for an independent audit committee of the board and that provide internal audit and risk management functions with sufficient resources, authority, and independence from management, as well as access to risk and audit committees of the board, would reinforce governance arrangements directly related to risk management at covered clearing agencies. A holistic approach to risk management could help ensure that policies and procedures that covered clearing agencies adopt pursuant to the proposed rules work in tandem with one another. For example, such an approach could result in risk-based membership standards under proposed Rule 17Ad-22(e)(18) that are consistent with policies and procedures related to the allocation of credit losses under proposed Rule 17Ad-22(e)(13)(i). The Commission preliminarily believes ensuring that a covered clearing agency's risk management activities fit within a unified framework could mitigate the risk of financial losses to

⁷⁰⁶ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad-22(e)(3)).

covered clearing agencies' members and participants in the markets they serve.

Additionally, the proposed rule extends requirements under Rules 17Ad-22(d)(4) and 17Ad-22(d)(11) by requiring plans for recovery and wind-down.⁷⁰⁷ To the extent that covered clearing agencies do not already have such plans in place, they may incur additional incremental costs. Plans for recovery and wind-down benefit both clearing members and, more generally, participants in markets where products are cleared. Many of the costs and benefits of such plans depend critically on the specific recovery and wind-down tools that covered clearing agencies choose to include in their rules. The presence of such plans could reduce uncertainty over the allocation of financial losses to clearing members in the event that a covered clearing agency faces losses due to member default or for other reasons that exceed its prefunded default resources. Further, recovery and wind-down plans that detail the circumstances under which clearing services may be suspended or terminated may mitigate the risk of market disruption in periods of financial stress. Market participants who face the possibility that the assets they trade may no longer be cleared and settled by a CCP may be unwilling to trade such assets at times when risk sharing is most valuable. While the effects are difficult to quantify, the Commission preliminarily believes that recovery and wind-down plans may support liquidity in times of financial stress.

Based on its supervisory experience, the Commission preliminarily believes that all covered clearing agencies have an independent audit committee of the board and most covered clearing agencies already have some rules governing recovery and wind-down of clearing operations but have plans that vary in their degree of formality. As a result, the benefits and costs associated with these requirements will likely be limited to incremental changes associated with covered clearing agencies' review of their policies and procedures for recovery and wind-down and to registered clearing agencies that move into the set of covered clearing agencies.

⁷⁰⁷ See *supra* Part 0 (discussing the requirements for recovery and orderly wind-down plans under proposed Rule 17Ad-22(e)(3)(ii)).

iv. Proposed Rules 17Ad–22(e)(4) Through (7): Financial Risk Management

(1) Proposed Rule 17Ad–22(e)(4): Credit Risk

Proposed Rule 17Ad–22(e)(4) would establish requirements for credit risk management by covered clearing agencies.⁷⁰⁸ Based on its supervisory experience, the Commission preliminarily believes that all entities that would be covered clearing agencies are already in compliance with proposed Rules 17Ad–22(e)(4)(i) through (iv). Pursuant to Rule 17Ad–22(b)(3), registered clearing agencies that provide CCP services currently maintain additional financial resources to meet the “cover one” requirement, and registered clearing agencies that would be complex risk profile clearing agencies under the proposed rules currently maintain financial resources to meet the “cover two” requirement.⁷⁰⁹ All covered clearing agencies exclude resources that are not prefunded when calculating this coverage.⁷¹⁰ As a result, the Commission preliminarily believes little or no additional direct costs or benefits will result from these requirements unless registered clearing agencies were to become covered clearing agencies and include resources that are not prefunded towards their resource requirements. The requirement to include only prefunded resources when calculating the financial resources available to meet the standards under proposed Rules 17Ad–22(e)(4)(i) through (iii) potentially reduces the risk that covered clearing agencies request financial resources from their members in times of financial stress, when members are least able to provide these resources.

While requiring “cover two” for complex risk profile clearing agencies and for covered clearing agencies designated systemically important in multiple jurisdictions would place additional burdens on the affected clearing agencies, the Commission preliminarily believes that the requirement is appropriate because disruption to these entities due to member default carries relatively higher

expected costs than for other covered clearing agencies. These relatively higher expected costs arise from the fact that covered clearing agencies designated systemically important in multiple jurisdictions are exposed to foreign financial markets and may serve as a conduit for the transmission of risk; for complex risk profile clearing agencies, high expected costs may arise from discrete jump-to-default price changes in the products they clear and higher correlations in the default risk of members.⁷¹¹

Proposed Rule 17Ad–22(e)(4)(vi) and (vii) would also impose additional costs by requiring additional measures to be taken with respect to the testing of a covered clearing agency’s financial resources and model validation of a covered clearing agency’s credit risk models. These requirements do not currently exist as part of the standards applied to registered clearing agencies.⁷¹² Covered clearing agencies may incur additional costs under expanded and more frequent testing of total financial resources if the formal requirement that results of monthly testing be reported to appropriate decision makers is a practice not currently used by covered clearing agencies. A range of costs for these new requirements is discussed in Part IV.C.3.a.iv(5).

Frequent monitoring and stress testing of total financial resources, conforming model validations, and reporting of results of the monitoring and testing to appropriate personnel within the clearing agency could help rapidly identify any gaps in resources required to ensure stability, even in scenarios not anticipated on the basis of historical data. Moreover, the requirement to test and, when necessary, update the assumptions and parameters supporting models of credit risk will support the adjustment of covered clearing agency financial resources to changing financial conditions, and mitigate the risk that covered clearing agencies will strategically manage updates to their risk models in support of cost reduction or profit maximization.

(2) Proposed Rule 17Ad–22(e)(5): Collateral

Proposed Rule 17Ad–22(e)(5) would require a covered clearing agency to have policies and procedures reasonably

designed to limit the assets it accepts as collateral to those with low credit, liquidity, and market risks, and to set and enforce appropriately conservative haircuts and concentration limits. Collateral haircut and concentration limit models would be subject to a not-less-than-annual review of their sufficiency.⁷¹³ Rule 17Ad–22(d)(3) currently requires registered clearing agencies to have policies and procedures reasonably designed to hold assets in a manner that minimizes risk of loss or risk of delay in access to them and invest assets in instruments with minimal credit, market, and liquidity risk.

By focusing on the nature of assets and not on accounts, the Commission preliminarily believes the proposed rule may allow covered clearing agencies the ability to manage collateral more efficiently. In particular, under the proposed rule, a covered clearing agency would have the option of accepting collateral that is riskier than cash and holding this collateral at commercial banks, potentially increasing default risk exposure. On the other hand, the requirement to regularly review concentration limits and haircuts mitigates the risk that a covered clearing agency’s collateral policies fail to respond to changing economic conditions. Based on its supervisory experience, the Commission understands that all registered clearing agencies that would meet the definition of a covered clearing agency already conform to the requirements under the proposed rule related to the nature of assets they may accept as collateral and the haircuts and concentration limits they apply to collateral assets, so the associated costs and benefits that would result from these requirements would apply only if registered clearing agencies not already in compliance were to become covered clearing agencies.

As a result of the proposed rule, these covered clearing agencies and registered clearing agencies that become covered clearing agencies may experience additional costs as a result of the proposed annual review requirements for the sufficiency of collateral haircut and concentration limit models. Based on its supervisory experience, the Commission preliminarily believes that many clearing agencies that require collateral would need to develop policies and procedures to review haircuts and concentration limits annually. Enforcement of the proposed haircut requirement would also require additional resources. A range of costs

⁷⁰⁸ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad–22(e)(4)).

⁷⁰⁹ The Commission also notes that no covered clearing agency would be systemically important in multiple jurisdictions unless and until the Commission made such a determination pursuant to proposed Rule 17Ab2–2. See *supra* Part 0 and *infra* Part 0 (discussing the determinations process under proposed Rule 17Ab2–2 and providing proposed rule text, respectively).

⁷¹⁰ See *supra* Part 0 (discussing current practices regarding credit risk management at registered clearing agencies).

⁷¹¹ Cf. PFMI Report, *supra* note 1, at 43 (discussing Principle 4, Explanatory Note 3.4.19).

⁷¹² Rule 17Ad–22(b)(4) requires a registered clearing agency’s policies and procedures be reasonably designed to provide for an annual validation of its margin models and the related parameters and assumptions. See 17 CFR 240.17Ad–22(b)(4).

⁷¹³ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad–22(e)(5)).

for these new requirements is discussed in Part IV.C.3.a.iv(5). Adherence to the new requirements by these entrants could extend the benefits of prompt loss coverage, incentive alignment, and systemic risk mitigation to a larger volume of cleared transactions.

(3) Proposed Rule 17Ad–22(e)(6):
Margin

Proposed Rule 17Ad–22(e)(6) would require a covered clearing agency that provides CCP services to have policies and procedures reasonably designed to require it to cover credit exposures using a risk-based margin system and to establish minimum standards for such a system. It would require these policies and procedures to cover daily collection of variation margin. The proposed rule also requires a set of policies and procedures generally designed to support a reliable margin system. Among these are policies and procedures to ensure the use of reliable price data sources and appropriate methods for measuring credit exposure, which could improve margin system accuracy. Finally, covered clearing agencies would be required to have policies and procedures related to the testing and verification of margin models.⁷¹⁴ Proposed Rules 17Ad–22(a)(6) and (14) support these requirements by addressing the means of verification for margin models and the level of coverage required of a margin system against potential future exposures, respectively. Based on its supervisory experience, however, the Commission understands that all current covered clearing agencies have policies and procedures that conform to the requirements under proposed Rules 17Ad–22(e)(6)(i) through (v) and (vii), and some will have to update their policies and procedures to comply with proposed Rule 17Ad–22(e)(6)(vi).

Similar to proposed Rules 17Ad–22(e)(4) and (7), covered clearing agencies that do not already engage in backtesting of margin resources at least once each day or engage in a monthly analysis of assumptions and parameters, as well as registered clearing agencies that enter into the set of covered clearing agencies in the future, may incur incremental compliance costs as a result of the proposed rule. Since margin plays a key role in clearing agency risk management, however, requiring that margin be periodically verified and modified as a result of changing market conditions may mitigate the risks posed by covered clearing agencies to financial markets in

periods of financial stress. Further, periodic review of model specification and parameters reduces the likelihood that covered clearing agencies opportunistically update margin models in times of low volatility and fail to update margin models in times of high volatility. A range of costs for verification and modification of margin models is discussed in Part IV.C.3.a.iv(5). Further, since risk-based initial margin requirements may cause market participants to internalize some of the costs borne by the CCP as a result of large or risky positions,⁷¹⁵ ensuring that margin models are well-specified and correctly calibrated with respect to economic conditions will help ensure that they continue to align the incentives of clearing members with the goal of financial stability.

(4) Proposed Rule 17Ad–22(e)(7):
Liquidity Risk

Proposed Rule 17Ad–22(e)(7) would require a covered clearing agency to have policies and procedures reasonably designed to effectively monitor, measure, and manage liquidity risk.⁷¹⁶ Parties to securities and derivatives transactions rely on clearing agencies for prompt clearance and settlement of transactions. Market participants in centrally cleared and settled markets are often linked to one another through intermediation chains in which one party may rely on proceeds from sales of cleared products to meet payment obligations to another party. If insufficient liquidity causes a clearing agency to fail to meet settlement or payment obligations to its members, consequences could include the default of a clearing member who may be depending on these funds to make a payment to another market participant, with losses then transmitted to others that carry exposure to this market participant if the market participant is depending on payments from the clearing members to make said payments to others. Therefore, the benefits related to liquidity risk management generally flow from the reduced risk of systemic risk transmission by covered clearing agencies as a result of liquidity shortfalls, either in the normal course of

operation or as a result of member default.

Enhanced liquidity risk management may produce additional benefits. Clearing members would face less uncertainty over whether a covered clearing agency has the liquidity resources necessary to make prompt payments which would reduce any need to hedge the risk of nonpayment. Potential benefits from enhanced liquidity risk management may also extend beyond members of covered clearing agencies or markets for centrally cleared and settled securities. Clearing members are often members of larger financial networks, and the ability of a covered clearing agency to meet payment obligations to its members can directly affect its members' ability to meet payment obligations outside of the cleared market. Thus, management of liquidity risk may mitigate the risk of contagion between asset markets.

Based on its supervisory experience, the Commission preliminarily believes that some covered clearing agencies would need to create new policies and procedures, or update existing policies and procedures, to meet requirements under the various subsections of proposed Rule 17Ad–22(e)(7). These actions would entail compliance costs, as noted in Part III.B.2. Further, the Commission preliminarily believes that for some covered clearing agencies the proposed requirements would require them to establish new practices. The cost of adherence to the proposed rule would likely be passed on to market participants in cleared markets, as discussed in more detail below.

Under proposed Rule 17Ad–22(e)(7)(i), a covered clearing agency would be required to have policies and procedures reasonably designed to require maintaining sufficient resources to achieve “cover one” for liquidity risk. This requirement mirrors the “cover one” requirement for credit risk in proposed Rule 17Ad–22(e)(4)(iii). Based on its supervisory experience, the Commission preliminarily believes that many covered clearing agencies do not currently meet a “cover one” requirement for liquidity and thus will likely incur costs to comply with this proposed rule. As discussed earlier, whether covered clearing agencies choose to gather liquidity directly from members or instead choose to rely on third-party arrangements, the costs of liquidity may be passed on to other market participants, eventually increasing transaction costs.⁷¹⁷ The

⁷¹⁴ See e.g., Philipp Haene & Andy Sturm, Optimal Central Counterparty Risk Management (Swiss Nat'l Bank Working Paper, June 2009) (addressing the tradeoff between margin and default fund, considering collateral costs, clearing member default probability, and the extent to which margin requirements are associated with risk mitigating incentives).

⁷¹⁶ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad–22(e)(7)).

⁷¹⁷ See *supra* Part 0 (discussing the effect of the proposed rules on concentration in the market for clearing services and among clearing members).

⁷¹⁴ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad–22(e)(6)).

requirement may, however, reduce the procyclicality of covered clearing agencies' liquidity demands, which may reduce costs to market participants in certain situations. For instance, the requirement would reduce the likelihood that a covered clearing agency would have to call on its members to contribute additional liquidity in periods of financial stress, when liquidity may be most costly.

Under proposed Rule 17Ad-22(e)(7)(ii), a covered clearing agency would be required to have policies and procedures reasonably designed to ensure that it meets the minimum liquidity resource requirement in proposed Rule 17Ad-22(e)(7)(i) with qualifying liquid resources.⁷¹⁸ Qualifying liquid resources would include cash held at the central bank or at a creditworthy commercial bank, assets that are readily converted into cash pursuant to committed lines of credit, committed foreign exchange swaps, committed repurchase agreements or other highly reliable prearranged funding agreements, or assets that may be pledged to a central bank in exchange for cash (if the covered clearing agency has access to routine credit at a central bank). The Commission notes that the proposed rules allow covered clearing agencies some measure of flexibility in managing qualifying liquid resources and that covered clearing agencies would be able to use creditworthy commercial bank services where appropriate.

Based on its supervisory experience, the Commission preliminarily believes that some covered clearing agencies currently do not meet the proposed liquidity requirements with qualifying liquid resources. As an alternative to the proposed rules, the Commission could have restricted the definition of qualifying liquid resources to assets held by covered clearing agencies. These covered clearing agencies and the markets they serve would benefit from the proposed minimum requirements for liquidity resources in terms of the reduced risk of liquidity shortfalls and associated contagion risks described above. However, qualifying liquid resources may be costly for covered clearing agencies to maintain on their own balance sheets. Such resources carry an opportunity cost. Assets held as cash are, by definition, not available for investment in less liquid assets that may be more productive uses of capital. This cost may ultimately be borne by clearing members who contribute liquid resources to covered clearing agencies to

meet minimum requirements under proposed Rule 17Ad-22(e)(7)(ii) and their customers.

The Commission notes that, under the proposed rules, covered clearing agencies have flexibility to meet their qualifying liquid resource requirements in a number of ways. In perfect capital markets, maintaining on-balance-sheet liquidity resources should be no more costly than entering into committed lines of credit or prearranged funding agreements backed by less-liquid assets that would allow these assets to be converted into cash. However, market frictions, such as search frictions, may enable banks to obtain liquidity at lower cost than other firms. In the presence of such frictions, obtaining liquidity using committed and uncommitted funding arrangements provided by banks may prove a less costly option for some covered clearing agencies than holding additional liquid resources on their balance sheets. In particular, the Commission preliminarily believes that requiring covered clearing agencies to enter into committed or uncommitted funding arrangements would decrease the costs that would be experienced by them in the event they sought to liquidate securities holdings during periods of market disruptions and increase the likelihood that they meet funding obligations to market participants by reducing the risk of delay in converting non-cash assets into cash.

The Commission notes that committed or uncommitted funding arrangements would only count towards minimum requirements to the extent that covered clearing agencies had securities available to post as collateral, so use of these facilities may require covered clearing agencies to require their members to contribute more securities. If these securities are costly for clearing members to supply, then additional required contributions to meet minimum requirements under proposed Rule 17Ad-22(e)(7)(ii) may impose burdens on clearing members and their customers. Similarly, prearranged funding arrangements may entail implicit costs to clearing members. Prearranged funding arrangements could impose costs on clearing members if they are obligated to contribute securities towards a collateral pool that the covered clearing agency would use to back borrowing. Alternatively, clearing members may be obligated under a covered clearing agency's rules to act as counterparties to repurchase agreements. Under the latter scenario, clearing members would bear costs associated with accepting securities in

lieu of cash. Additionally, the Commission notes certain explicit costs specifically associated with these arrangements outlined below.

Counterparties to committed arrangements allowable under proposed Rule 17Ad-22(a)(15) charge covered clearing agencies a premium to provide firm liquidity commitments and additional out-of-pocket expenses will be incurred establishing and maintaining committed liquidity arrangements. The Commission preliminarily estimates that the total cost of committed funding arrangements will be approximately 30 basis points per year, including upfront fees, legal fees, commitment fees, and collateral agent fees.⁷¹⁹ Furthermore, the Commission is aware of other potential consequences of these arrangements. In some instances, they may cause entities outside of a covered clearing agency to bear risks ordinarily concentrated within the covered clearing agency, while, in others, these arrangements may result in increased exposure of covered clearing agencies to certain members.⁷²⁰ Financial intermediaries that participate in committed credit facilities may be those least able to provide liquidity in times of financial stress, so these commitments may represent a route for risk transmission.⁷²¹ Finally, the Commission notes that covered clearing agencies may face constraints in the size of credit facilities available to them. Recent market statistics have estimated the total size of the committed credit facility market in the U.S. at \$1.2 trillion with only 12 of 1800 facilities exceeding \$10 billion in size.⁷²² Given the volume of activity at covered clearing agencies, it is possible that they may only be able to use committed credit facilities to meet a portion of their liquidity requirements under proposed Rule 17Ad-22(e)(7)(ii).

A covered clearing agency may alternatively use a prearranged funding

⁷¹⁹ See Letter from Kim Taylor, President, CME Clearing, to Melissa Jurgens, Office of the Secretariat, CFTC, Sept. 16, 2013, at 13 & n.48 (noting CME's assumption that the cost of committed liquidity or committed repurchase facilities is approximately \$3 million for every \$1 billion of required committed facilities, including upfront fees, commitment fees, legal fees, and collateral agent fees).

⁷²⁰ See *id.* at 11.

⁷²¹ See Letter from Robert C. Pickel, CEO, ISDA to Secretary, CFTC, Sept. 16, 2013, at 4 (discussing collateral and liquidity requirements); see also Craig Pirrong, *Clearing and Collateral Mandates: A New Liquidity Trap?*, 24 J. Applied Corp. Fin. 67 (2012).

⁷²² See Bloomberg, *Global Syndicated Loans, 1st Half 2013 League Tables* (July 1, 2013), available at <http://www.bloomberg.com/professional/files/2012/08/Global-Syndicated-Loans-2012.pdf>.

⁷¹⁸ See proposed Rule 17Ad-22(a)(15), *infra* Part 0 (defining "qualifying liquid resources").

arrangement determined to be highly reliable in extreme but plausible market conditions to raise liquid resources backed by non-cash assets but that does not require firm commitments from liquidity providers. This strategy would avoid certain of the explicit fees associated with firm commitments, while incurring costs related to the annual review and maintenance of such arrangements. Based on its supervisory experience and discussions with market participants, the Commission preliminarily believes the cost associated with commitment fees to be between 5 and 15 basis points per year. Given the 30 basis point cost associated with committed funding arrangements, mentioned above, uncommitted facilities could entail costs of between 15 and 25 basis points.⁷²³ Prearranged funding arrangements may ultimately prove less costly than holding cash and may be more widely available than committed arrangements, while still reducing the likelihood of delay faced by covered clearing agencies that attempt to market less-liquid assets. As mentioned above in the context of committed credit facilities, the Commission acknowledges that financial institutions who offer to provide liquidity to covered clearing agencies on an uncommitted basis may be least able to do so in times of financial stress, when access to liquidity is most needed by the covered clearing agency. Without a commitment in place, counterparties retain the option to fail to provide liquidity during stressed conditions, when liquidity is most valuable to clearing agencies and the markets they serve. To the extent covered clearing agencies may establish requirements for clearing members to provide liquidity to ensure compliance with the Commission's proposed rules, the costs experienced by members indirectly may exceed those associated with committed credit facilities.

Finally, covered clearing agencies that have access to routine credit at a central bank could meet the qualifying liquid resources requirement with assets that are pledgeable to a central bank. The Commission notes that this may represent the lowest cost option for covered clearing agencies, but understands that this latter provision would represent an advantage only if and when a covered clearing agency

receives the benefit of access to routine central bank borrowing. The Commission anticipates that at such future time access to routine credit at a central bank would provide covered clearing agencies with additional flexibility with respect to resources used to comply with the liquidity risk management requirements of proposed Rules 17Ad-22(e)(7)(i) and (ii).

The total cost of maintaining qualifying liquid resources pursuant to proposed Rules 17Ad-22(e)(7)(i) and (ii) is composed of the cost of each liquidity source including assets held by covered clearing agencies, committed credit facilities and prearranged funding agreements, multiplied by the quantity of each of these liquidity sources held by covered clearing agencies. The Commission is unable to quantify the cost of cash held by clearing agencies and securities required to back credit facilities since such estimates would require detailed information about additional required contributions of clearing members under the proposed rules, as well as clearing members' best alternative to holding cash and securities.⁷²⁴ As mentioned above, however, the Commission has limited information about the costs associated with committed and uncommitted credit facilities. Based on this information, we are able to quantify the costs associated with committed credit facilities that will result from the requirement to maintain qualifying liquid resources. The Commission preliminarily estimates that the cost of compliance with the proposed rules will be between \$133 million and \$225 million per year as a result of the requirement to enter into prearranged funding agreements for non-cash assets used to meet liquidity requirements under proposed Rules 17Ad-22(e)(7)(i) and (ii). This analysis assumes that covered clearing agencies will enter into such agreements at arm's length on an uncommitted basis. Based on staff discussions with market participants, the Commission understands that alternative arrangements between covered clearing agencies and their members may be obtained at lower cost, though these arrangements may come with increased wrong-way risk.⁷²⁵

⁷²⁴ Covered clearing agencies may choose to allocate liquidity burdens based on a number of factors related to the markets they serve and their membership. See, e.g., Exchange Act Release No. 34-70999 (Dec. 5, 2013), 78 FR 75400 (Dec. 11, 2013) (Commission order approving NSCC rule change to institute supplemental liquidity deposits to its clearing fund designed to increase liquidity resources to meet its liquidity needs).

⁷²⁵ To produce this range, the Commission used a combination of publicly available information from SRO rule filings, comment letters, and 2012

U.S. Treasury securities would not fall under the proposed definition of qualifying liquid resources. The Commission understands that U.S. Treasury markets represent some of the largest and most liquid markets in the world, see Part IV.B.3.f.ii, and that, in "flights to quality" and "flights to liquidity" in times of financial stress, U.S. Treasuries trade at a premium to other assets.⁷²⁶ If, as an alternative to the proposed rules, the Commission included U.S. government securities in the definition of qualifying liquid resources, the Commission preliminarily estimates the cost of complying with requirements under proposed Rule 17Ad-22(e)(7)(i) and (ii) would be reduced by between \$9 million and \$225 million per year.⁷²⁷

annual financial statements, and non-public information gathered as a result of its regulatory role. For each covered clearing agency, the Commission assumed that the covered clearing agency's guaranty fund represents the sole source of liquidity used to satisfy its minimum liquidity requirements under the proposed rules. To compute the level of qualifying liquid resources currently held by each covered clearing agency, the Commission assumed that cash in the covered clearing agency's guaranty fund remains fixed at current levels and added to this any amount from credit facilities that could be backed by the value of securities held in the covered clearing agency's guaranty funds.

Taking the sum of these current qualifying liquid resources over all covered clearing agencies and subtracting this from the sum of the "cover one" guaranty fund requirement over all covered clearing agencies results in the total shortfall relative to minimum requirements under proposed Rules 17Ad-22(e)(7)(i) and (ii). The Commission further assumed that covered clearing agencies would cover this shortfall using prearranged funding agreements backed by additional securities posted to guaranty funds by clearing members. Finally, the Commission multiplied the total prearranged funding amount by between 0.15% and 0.25% to arrive at a range of ongoing costs.

⁷²⁶ See Alessandro Beber, Michael W. Brandt & Kenneth A. Kavajecz, Flight-to-Quality or Flight-to-Liquidity? Evidence from the Euro-Area Bond Market, 22 Rev. Fin. Stud. 925 (2009) (decomposing sovereign yield spreads into credit and liquidity components and showing that credit quality matters for bond valuation but that, in times of market stress, investors chase liquidity, not quality); Markus K. Brunnermeier & Lasse Heje Pedersen, Market Liquidity and Funding Liquidity, 22 Rev. Fin. Stud. 2201 (2009) (showing, in a theoretical model, how with low wealth shocks, demand for illiquid assets falls off more sharply than demand for liquid assets); Francis A. Longstaff, The Flight-to-Liquidity Premium in U.S. Treasury Bond Prices, 77 J. Bus. 511 (2004) (estimating the liquidity premium associated with U.S. Treasuries relative to close substitutes); Dimitri Vayanos Flight to Quality, Flight to Liquidity, and the Pricing of Risk (NBER Working Paper No. 10327, Feb. 2004) (showing, in a theoretical model, that during volatile times, assets' liquidity premia increase), available at <http://www.nber.org/papers/w10327.pdf>.

⁷²⁷ The Commission re-estimated the level of prearranged funding agreements required to meet requirements under proposed Rules 17Ad-22(e)(7)(i) and (ii) using the data and methodology described in note 725, except in this case the Commission assumed that all non-defaulting

⁷²³ Subtracting the lower bound of commitment fees (5 basis points) from the estimated total cost of a committed facility (30 basis points) yields an estimate of the upper bound of the fees associated with an uncommitted facility (30 - 5 = 25 basis points). We estimate the lower bound of fees associated with an uncommitted facility analogously (30 - 15 = 15 basis points).

The Commission preliminarily believes, however, that there are benefits to including government securities only if prearranged funding agreements exist. In particular, given the quantity of these securities financed by the largest individual dealers, fire-sale conditions could materialize if collateral is liquidated in a disorderly manner, which could prevent covered clearing agencies from meeting payment obligations.⁷²⁸

Proposed Rule 17Ad-22(e)(7)(iii) concerns access to accounts and services at a central bank, when available and where practical.⁷²⁹ The Commission preliminarily believes that it may be beneficial for covered clearing agencies to use central bank account services because doing so would reduce exposure to commercial bank default risk. Moreover, for some covered clearing agencies, central bank services may represent the lowest-cost admissible funding arrangement under the proposed rule. The Commission understands, however, that central bank services are only currently available to a subset of covered clearing agencies, and the proposed rule only requires policies and procedures to ensure use of central bank accounts and services when practical and available.

Proposed Rules 17Ad-22(e)(7)(iv) and (v) address relations between covered clearing agencies and their liquidity providers. The Commission preliminarily believes that a key benefit of these proposed rules would be an increased level of assurance that liquidity providers would be able to supply liquidity to covered clearing agencies on demand. Such assurance is especially important because of the possibility that covered clearing agencies may rely on outside liquidity

providers to convert non-cash assets into cash using prearranged funding arrangements or committed facilities, pursuant to proposed Rule 17Ad-22(e)(7)(ii) and the definition of qualifying liquid resources in proposed Rule 17Ad-22(a)(15). The required policies and procedures would ensure the covered clearing agency undertakes due diligence to confirm that it has a reasonable basis to believe each of its liquidity providers understand the liquidity risk borne by the liquidity provider, and that the liquidity provider would have the capacity to provide liquidity under commitments to the covered clearing agency. Finally, covered clearing agencies would be required, under the proposed rule, to maintain and test the covered clearing agency's procedures and operational capacity for accessing liquidity under their agreements. The Commission preliminarily believes that, besides the costs associated with new or updated policies and procedures discussed in Part III.B.2, covered clearing agencies and liquidity providers may experience costs associated with the proposed rules as a result of the requirement to test liquidity resources, such as, for example, fees associated with conducting test draws on a covered clearing agency's credit lines. Costs associated with ongoing monitoring and compliance related to testing are included in the Commission's estimate of quantifiable costs presented in Part IV.C.3.d.

Proposed Rules 17Ad-22(e)(7)(vi) and (vii) may impose costs on covered clearing agencies as a result of requirements for testing the sufficiency of liquidity resources and validating models used to measure liquidity risk. The testing and model validation requirements of these proposed rules are similar to requirements for testing and model validation for credit risk in proposed Rules 17Ad-22(e)(4)(vi) and (vii), and the Commission preliminarily believes that these proposed rules would yield similar benefits. Frequent monitoring and testing liquidity resources could help rapidly identify any gaps in resources required to meet payment obligations. Moreover, the requirement to test and, when necessary, update the assumptions and parameters supporting models of liquidity risk will support the adjustment of covered clearing agency liquidity resources to changing financial conditions and mitigate the risk that covered clearing agencies will strategically manage updates to their liquidity risk models in support of cost-reduction or profit-maximization.

Proposed Rule 17Ad-22(e)(7)(viii) addresses liquidity shortfalls at a covered clearing agency, and the Commission preliminarily believes the proposed rule would reduce ambiguity related to settlement delays in the event of liquidity shocks. Among other things, by requiring procedures that seek to avoid delay of settlement payments, this proposed rule would require covered clearing agencies to address liquidity concerns in advance rather than relying on strategies of delaying accounts payable in the event of liquidity shocks. As discussed previously, effective liquidity risk management by covered clearing agencies that serves to eliminate uncertainty on the part of clearing members that payments by the covered clearing agency will be made on time may allow these clearing members to allocate their liquidity resources to more efficient uses than holding precautionary reserves.⁷³⁰ The Commission preliminarily believes the proposed rule may reduce some of the flexibility covered clearing agencies have in the absence of the proposed rule, which could impose additional burdens on these clearing agencies as discussed in Part IV.C.1.b.

Proposed Rule 17Ad-22(e)(7)(ix) would require a covered clearing agency to have policies and procedures reasonably designed to describe its process for replenishing any liquid resources that it may employ during a stress event.⁷³¹ The ability to replenish liquidity resources is critical to ensure that covered clearing agencies are able to continue operations after a stress event. Beyond the general benefits associated with liquidity risk management noted earlier, this proposed rule would yield particular benefits insofar as it would reduce uncertainty about covered clearing agency liquidity resources at precisely those times when information about liquidity may be most important to market participants.

Finally, proposed Rule 17Ad-22(e)(7)(x) would require a covered clearing agency that provides CCP services and is either systemically important in multiple jurisdictions or is a clearing agency involved in activities with a more complex risk profile to conduct a feasibility analysis for "cover two."⁷³² The primary cost associated with this rule will be an annual analysis by the affected covered clearing agencies. Costs associated with a

member resources applied to funding obligations were a mix of cash and U.S. Treasuries for a lower bound, and assumed that all resources applied to funding obligations were a mix of cash and U.S. Treasuries for an upper bound.

Taking the sum of these current qualifying liquid resources over all covered clearing agencies and subtracting this from the sum of cover one guaranty fund requirement over all covered clearing agencies results in the total shortfall relative to minimum requirements under proposed Rules 17Ad-22(e)(7)(i) and (ii) if U.S. government and agency securities were considered qualifying liquid resources. As above, the Commission further assumed that covered clearing agencies would cover this shortfall using prearranged funding agreements backed by additional securities posted to guaranty funds by clearing members and multiplied this amount by between 0.15% and 0.25% to arrive at a range of ongoing costs.

⁷²⁸ Brian Begalle et al., *The Risk of Fire Sales in the Tri-Party Repo Market*, at 19 & n.37 (FRBNY Staff Report No. 616, May 2013), available at http://www.newyorkfed.org/research/staff_reports/sr616.pdf.

⁷²⁹ See proposed Rule 17Ad-22(e)(7)(iii), *infra* Part 0.

⁷³⁰ See *supra* Part 0.

⁷³¹ See proposed Rule 17Ad-22(e)(7)(ix), *infra* Part 0.

⁷³² See proposed Rule 17Ad-22(e)(7)(x), *infra* Part 0.

feasibility study would likely include the cost of staffing and consulting, which will depend on the scope of products cleared and the particular approach taken by each covered clearing agencies. The costs associated with this requirement are included in Part IV.C.3.d.

(5) Testing and Validation of Risk Models

Proposed Rules 17Ad–22(e)(4) through (7) include requirements for covered clearing agencies to have policies and procedures reasonably designed to test and validate models related to financial risks. Covered clearing agencies may incur additional costs under expanded and more frequent testing of financial resources if the proposed requirements for testing and validation do not conform to practices currently used by covered clearing agencies.⁷³³ These costs are composed of two portions. The first encompasses startup costs related to collection and storage of data elements necessary to implement testing and validation, along with investments in software tools and human capital to support these functions. The second portion of costs includes the ongoing, annual costs of conducting testing and validation under the proposed rules.

Based on its supervisory experience and discussions with industry participants, the Commission preliminarily believes that startup costs to support testing and validation of credit risk, margin, and liquidity risk models at covered clearing agencies could fall in the range of \$5 million to \$25 million for each covered clearing agency. This range primarily reflects investments in information technology to process data already available to covered clearing agencies for stress testing and validation purposes. The range's width reflects differences in markets served by, as well as the scope of operations of, each covered clearing agency. Based on its supervisory experience and discussions with industry participants, the Commission estimates a lower bound of \$1 million per year for ongoing costs related to testing of risk models.

Should each covered clearing agency choose to hire external consultants for the purposes of performing model validation required under proposed

Rules 17Ad–22(e)(4) and 17Ad–22(e)(7) through written policies and procedures, the Commission preliminarily estimates the ongoing cost associated with hiring such consultants would be approximately \$4,388,160 in the aggregate.⁷³⁴

The Commission acknowledges that it could have, as an alternative, proposed rules that would require testing and validation of financial risk models at covered clearing agencies at different frequencies. For example, the Commission could have required backtesting of margin resources less frequently than daily. Such a policy could imply less frequent adjustments in margin levels that may result in over- or under-margining. The Commission preliminarily believes that the frequencies of testing and validation of financial risk models that it has proposed are appropriate given the risks faced by covered clearing agencies and current market practices related to frequency of meetings of risk management committees and boards of directors at covered clearing agencies.

v. Proposed Rules 17Ad–22(e)(8) Through (10): Settlement and Physical Delivery

Proposed Rules 17Ad–22(e)(8) through (10) require covered clearing agencies to have policies and procedures reasonably designed to address settlement risk. Many of the issues raised by settlement are similar to those raised by liquidity. Uncertainty in settlement may make it difficult for clearing members to fulfill their obligations to other market participants within their respective financial networks if they hold back precautionary reserves, as discussed above. Based on its supervisory experience, the Commission preliminarily believes that the benefits and costs for the majority of covered clearing agencies will likely be limited. Registered clearing agencies that enter into the set of covered clearing agencies in the future, by contrast, may bear more significant costs as a result of the enhanced standards.

⁷³⁴ This figure was calculated as follows: 2 Consultants for 40 hours per week at \$653 per hour = \$52,240 × 12 weeks = \$626,880 per clearing agency × 7 covered clearing agencies = \$4,388,160. The \$653 per hour figure for a consultant was calculated using www.payscale.com, modified by Commission staff to account for an 1800-hour work-year and multiplied by 5.35 to account for bonuses, firm size, employee benefits, and overhead.

The Commission previously estimated that ongoing costs associated with hiring external consultants to fulfill the requirements of Rule 17Ad–22(b)(4) would be approximately \$3.9 million per year. See Clearing Agency Standards Release, *supra* note 5, at 66261.

Settlement finality is important to market participants for a number of reasons. Reversal of transactions can be costly to participants. For example, if transactions are reversed, buyers and sellers of securities may be exposed to additional market risk as they attempt to reestablish desired positions in cleared products. Similarly, reversal of transactions may render participants expecting to receive payment from the covered clearing agency unable to fulfill payment obligations to their counterparties, exposing these additional parties to the transmitted credit risk. Finally, settlement finality can help facilitate default management procedures by covered clearing agencies since they improve transparency of members' positions. Unless settlement finality is established by covered clearing agencies, market participants may attempt to hedge reversal risk for themselves. This could come at the cost of efficiency if it means that, on the margin, participants are less likely to use cleared products as collateral in other financial transactions.

In addition, settlement in central bank money, where available and determined to be practical by the board of directors of the covered clearing agency, as the proposed rules would require, greatly reduces settlement risk related to payment agents. Using central bank accounts to effect settlement rather than settlement banks removes a link from the intermediation chain associated with clearance and settlement. As a result, a covered clearing agency would be less exposed to the default risk of its settlement banks. In cases where settlement banks maintain links to other covered clearing agencies, for example as liquidity providers or as members, reducing exposure to settlement bank default risk may be particularly valuable.

As in the case of proposed Rule 17Ad–22(e)(7)(iii), the Commission acknowledges there may be circumstances in which covered clearing agencies either do not have access to central bank account services or the use of such services is impractical. Accordingly, the Commission preliminarily believes it is appropriate to allow covered clearing agencies the flexibility to also use commercial bank account services to effect settlement, subject to a requirement that covered clearing agencies monitor and manage the risks associated with such arrangements.

vi. Proposed Rule 17Ad–22(e)(11): CSDs

CSDs play a key role in modern financial markets. For many issuers, many transactions in their securities

⁷³³ The Commission notes that while the stress testing provisions in proposed Rules 17Ad–22(e)(4) through (7) include new requirements for covered clearing agencies, Rule 17Ad–22(b)(4) requires registered clearing agencies that provide CCP services for security-based swaps to have policies and procedures for a general margin model validation requirement. See *supra* note 712.

involve no transfer of physical certificates.

Paperless trade generally improves transactional efficiency. Book-entry transfer of securities may facilitate conditional settlement systems required by proposed Rule 17Ad-22(e)(12). For example, book-entry transfer in a delivery versus payment system allows securities to be credited to an account immediately upon debiting the account for the payment amount. Institutions and individuals may elect to no longer hold and exchange certificates that represent their ownership of securities. An early study showed that the creation of DTC resulted in a 30–35% reduction in the physical movement of certificates.⁷³⁵ Among other benefits, to the extent that delays in exchanging paper certificates result in settlement failures, immobilization and dematerialization of shares reduces the frequency of these failures.⁷³⁶

For markets to realize the transactional benefits of paperless trade, however, requires confidence that CSDs can correctly account for the number of securities in their custody and for the book entries that allocate these securities across participant accounts. In order to realize these benefits, the proposed rules also require covered CSDs to establish, implement, maintain and enforce written policies and procedures reasonably designed to ensure the integrity of securities issues, minimize the risks associated with transfer of securities, and protect assets against custody risk. Based on its supervisory experience, the Commission preliminarily believes that registered CSDs already have infrastructure in place to meet these requirements. However, CSDs may face incremental compliance costs in instances where they must modify their rules in order to implement appropriate controls. Compliance costs may be higher for potential new CSDs that are determined to be covered clearing agencies in the future.

vii. Proposed Rule 17Ad-22(e)(12): Exchange-of-Value Settlement Systems

Clearance and settlement of transactions between two parties to a trade involves an exchange of one

obligation for another. Regarding transactions in securities, these claims can be securities or payments for securities. A particular risk associated with transactions is principal risk, which is the risk that only one obligation is successfully transferred between counterparties. For example, in a purchase of common stock, a party faces principal risk if, despite successfully paying the counterparty for the purchase, the counterparty may fail to deliver the shares.

The proposed requirements under Rule 17Ad-22(e)(12) are substantially the same as those in Rule 17Ad-22(d)(13).⁷³⁷ As a result, covered clearing agencies that have been in compliance with Rule 17Ad-22(d)(13) face no substantially new requirements under Proposed Rule 17Ad-22(e)(12). The Commission preliminarily expects the proposed rule would likely impose limited material additional costs on covered clearing agencies. It would also produce benefits in line with the general economic considerations discussed in Part IV.C.1. The economic effects may differ for registered clearing agencies that enter into the set of covered clearing agencies in the future.

viii. Proposed Rule 17Ad-22(e)(13): Participant-Default Rules and Procedures

Proposed Rule 17Ad-22(e)(13) would require covered clearing agencies to have policies and procedures for participant default with additional specificity relative to current requirements for registered clearing agencies under Rule 17Ad-22(d)(11). In particular, proposed Rule 17Ad-22(e)(13) requires policies and procedures that address the allocation of credit losses that exceed default resources, repayment of liquidity providers, replenishment of financial resources, and testing and review of default procedures.

Based on its supervisory experience, the Commission preliminarily believes all covered clearing agencies currently test and review default procedures at least annually, so the costs of this requirement would apply only to registered clearing agencies that may enter into the set of covered clearing agencies in the future. Most covered clearing agencies, however, will be required to update their policies and procedures as a result of proposed Rules 17Ad-22(e)(13)(i) and (ii). Clearing

members may experience benefits from proposed Rule 17Ad-22(e)(13)(i), which requires covered clearing agencies to provide disclosure to members regarding the allocation of default losses when these losses exceed the level of financial resource it has available. As a result of this additional transparency, clearing members may experience an improved ability to manage their expectations of potential obligations against the covered clearing agency, which may increase the likelihood of orderly wind-downs in the event of member default. Crafting such allocation plans by covered clearing agencies may entail certain compliance costs, as previously discussed in Part III.D.5.a and as discussed further in Part IV.C.3.d. Further, covered clearing agencies may allocate default losses in a number of ways that may themselves have implications for participation, competition, and systemic risk.⁷³⁸ For example, if, as a part of a default resolution plan, selective tear-up is contemplated after a failed position auction, then clearing members who expect low loss exposure in the tear-up may not have adequate incentives to participate in the position auction, even if they are better able to absorb losses than clearing members who expect high exposure in the tear-up plan. This would increase the chances of a failed auction and the chances of a protracted and more disruptive wind-down. Thus, the total costs of any loss allocation plan may depend largely on the particular choices embedded in covered clearing agencies' plans.

As an alternative to the proposed rules, the Commission could have proposed more prescriptive requirements for default procedures at covered clearing agencies. The Commission preliminarily believes that differences in cleared assets and in the characteristics of clearing members supports allowing each covered clearing agency flexibility in choosing its own default procedures pursuant to proposed Rule 17Ad-22(e)(13).

In addition to loss allocation plans, proposed Rule 17Ad-22(e)(13) contains new provisions related to the replenishment of financial resources and testing and review of default procedures that do not appear in Rule 17Ad-22(d)(11). The Commission preliminarily believes that proposed rules related to replenishment of financial resources may reduce the potential for systemic risk and contagion in cleared markets, as they

⁷³⁵ See Neal L. Wolkoff & Jason B. Werner, *The History of Regulation of Clearing in the Securities and Futures Markets, and Its Impact on Competition*, 30 Rev. Banking & Fin. L. 313, 323 (2010).

⁷³⁶ See Commission, *Study of Unsafe and Unsound Practices of Brokers and Dealers*, H.R. Doc. No. 231, 92nd Cong., 1st Sess. 13, at 168 (1971) (suggesting that the delivery and transfer process for paper certificates were a principal cause of failures to deliver and receive during the "paperwork crisis" of the late 1960s).

⁷³⁷ See *supra* note 274; *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad-22(e)(13)); *supra* Part 0 (discussing current practices among registered clearing agencies regarding exchange-of-value settlement systems); see also 17 CFR 240.17Ad-22(d)(13).

⁷³⁸ See, e.g., Elliot, *supra* note 617 (discussing various loss-allocation rules and CCP recovery and wind-down).

facilitate covered clearing agencies' prompt access to these resources in times of financial stress. The Commission also preliminarily believes that broad-based participation in the testing of default procedures could reduce disruption to cleared markets in the event of default. However, to the extent that testing of these procedures requires participation by members of covered clearing agencies, members' customers, and other stakeholders, these parties may bear costs under the proposed rules. The Commission is unable to quantify the economic effects of participation in these tests at this time.

ix. Proposed Rule 17Ad-22(e)(14): Segregation and Portability

Segregation and portability of customer positions serves a number of useful purposes in cleared markets. In the normal course of business, the ability to efficiently identify and move an individual customer's positions and collateral between clearing members enables customers to easily terminate a relationship with one clearing member and initiate a relationship with another. This may facilitate competition between clearing members by ensuring customers are free to move their accounts from one clearing member to another based on their preferences, without being unduly limited by operational barriers.⁷³⁹

Segregation and portability may be especially important in the event of participant default. By requiring that customer collateral and positions remain segregated, covered clearing agencies can facilitate, in the event of a clearing member's insolvency, the recovery of customer collateral and the movement of customer positions to one or more other clearing members. Further, portability of customer positions may facilitate the orderly wind down of a defaulting member if customer positions may be moved to a non-defaulting member. Porting of positions in a default scenario may yield benefits for customers if the alternative is closing-out positions at one clearing member and reestablishing them at another clearing member. The latter strategy would cause customers to bear transactions costs, which might be especially high in times of financial stress.

The Commission notes that, in its preliminary view, these proposed rules

are flexible in their approach to implementing segregation and portability requirements. The most efficient means of implementing these requirements may depend on the products that a covered clearing agency clears as well as other business practices at a covered clearing agency. For example, a clearing agency's decision whether or not to collect margin on a gross or net basis may bear on its decision to port customer positions and collateral on an individual or omnibus basis, and while an individual account structure may provide a higher degree of protection from a default by another customer, it may be operationally and resource intensive for a covered clearing to implement and may reduce the efficiency of its operations.

As a result, the costs and benefits of proposed Rule 17Ad-22(e)(14) will depend on specific rules implemented by covered clearing agencies as well as how much these rules differ from current practice. Based on its supervisory experience, the Commission preliminarily believes that the current practices at covered clearing agencies to which the proposed rule would apply already meets segregation requirements under the proposed rule, so any costs and benefits for covered clearing agencies would flow from implementing portability requirements, though it potentially raises a barrier to entry for security-based swap clearing agencies or clearing agencies involved in activities with a more complex risk profile that seek to become covered clearing agencies.

x. Proposed Rule 17Ad-22(e)(15): General Business Risk

While proposed Rules 17Ad-22(e)(4) and 17Ad-22(e)(7) require that covered clearing agencies have policies and procedures reasonably designed to address credit risk and liquidity risk, proposed Rule 17Ad-22(e)(15) requires that covered clearing agencies have policies and procedures reasonably designed to address general business risk. The Commission preliminarily believes that general business losses experienced by covered clearing agencies represent a distinct risk to cleared markets, given limited competition and specialization of clearing agencies. In this regard, the loss of clearing services due to general business losses would likely result in major market disruption. The proposed rule requires a covered clearing agency to have policies and procedures reasonably designed to mitigate the risk that business losses result in the disruption of clearing services. Under these policies and procedures covered

clearing agencies would hold sufficient liquid resources funded by equity to cover potential general business losses, which at a minimum would constitute six months of operating expenses. The Commission preliminarily believes that the benefits of such policies and procedures would flow primarily from covered clearing agencies that would be required to increase their holdings of liquid net assets funded by equity, enabling them to sustain their operations for sufficient time and achieve orderly wind-down if such action is eventually necessary.

The Commission could have proposed a higher or lower minimum level of resources, for example, corresponding to one quarter of operating expenses or one year of operating expenses. The Commission preliminarily believes, however, that the rules, as proposed, afford covered clearing agencies sufficient flexibility in determining the level of resources to hold while maintaining a minimum standard that supports continued operations in the event of general business losses. As another alternative, the Commission could have allowed covered clearing agencies additional flexibility in determine the nature of the financial resources held to mitigate the effects of general business risk or the means by which these resources are funded. The Commission preliminarily believes, however, that by specifying that these resources be liquid in nature, the proposed rule would limit any delays by covered clearing agencies that suffer business losses from paying expenses required for continued operations. Additionally, by specifically requiring that a covered clearing agency draw liquid net resources from members as equity capital, the proposed rules may also encourage members to more closely monitor the business operations of a covered clearing agency, which may reduce the likelihood of losses.

Based on its supervisory experience Commission preliminarily believes that certain covered clearing agencies would be required to establish and maintain policies and procedures providing for specified levels of equity capital and higher levels of liquid net assets than they would in the absence of proposed Rule 17Ad-22(e)(15).⁷⁴⁰ Table 2 contains summary information from five registered clearing agencies and estimates, solely for purposes of evaluating the costs and benefits of proposed Rule 17Ad-22(e)(15), the amount of additional capital these entities would be required to establish

⁷⁴⁰ Additional equity capital may be raised through share issuance or by retaining earnings.

⁷³⁹ See, e.g., Paul Klemperer, *Competition When Consumers Have Switching Costs: An Overview with Applications to Industrial Organization, Macroeconomics, and International Trade*, 62 Rev. Econ. Stud. 515 (1995) (presenting an overview of switching costs and their effects on competition).

and maintain to comply with the proposed rule. As the Commission has not previously had such a capital requirement, the estimate is based on one half of the average annual operating expenses for each covered clearing agency as reflected in their annual financial statements over the five-year period ending December 31, 2012.⁷⁴¹

Table 2 identifies cash and cash equivalents as liquid assets and averages

this over the same five-year period. A key shortcoming of using publicly available financial data is the difficulty in determining how much of a firm's cash and cash equivalents are funded by either equity or liabilities, or both. To this end, the Commission considered two different cases.⁷⁴² In Case 1, the Commission assumed that cash on each clearing agency's balance sheet was

funded by liabilities first, with the residual funded by equity. In Case 2, the Commission assumed that cash on each clearing agency's balance sheet was funded pro-rata by equity and liabilities.⁷⁴³ This procedure likely yields an upper bound for estimates of additional equity necessary to meet the minimum reserve requirements.

TABLE 2—HYPOTHETICAL ADDITIONAL EQUITY NECESSARY TO MEET REQUIREMENTS UNDER PROPOSED RULE 17Ad–22(e)(15), IN MILLIONS OF DOLLARS, BASED ON YEARS 2008–2012⁷⁴⁴

	DTC	FICC	ICEEU	NSCC	OCC
Average Six Months Operating Expense	166	62	41	94	68
Average Cash and Cash Equivalents	3,151	8,259	129	3,838	64
Average Liabilities	3,364	8,471	84	3,833	155
Cash Funded by Equity	0	0	45	5	0
Average Total Equity	282	97	192	125	15
Average Net Income	21	16	119	26	2
Case 1, Additional Equity Needed	166	62	0	89	68
Case 2, Additional Equity Needed	0	0	0	0	63

Absent market frictions, a change in capital structure should have no effect on the value of a covered clearing agency.⁷⁴⁵ The Commission acknowledges that market imperfections such as asymmetric information, moral hazard, and regulation may imply that covered clearing agencies that would need to raise additional equity capital incur opportunity costs for holding this additional capital rather than investing it in projects or distributing it back to equity holders who might, in turn, invest in projects.

To estimate these costs, the Commission applied the capital asset pricing model to observed returns for CME and ICE, two clearing agencies that have publicly-traded equity

outstanding.⁷⁴⁶ This methodology yielded an estimate of the cost of equity for these two clearing agencies of approximately 10%. Applying estimated cost of equity to the lower bound of additional equity required under the proposed rule suggests an annual cost of \$16 million, while applying this cost to the upper bound of additional equity needed suggests an annual cost of \$50 million.⁷⁴⁷ These estimates are subject to a number of caveats. In particular, this exercise does not take into account the possibility that equity finance may reduce the cost of equity due to the resulting decrease in leverage,⁷⁴⁸ or that clearing agencies might simultaneously raise equity while reducing liabilities. Both of these possibilities would likely

reduce the cost to covered clearing agencies of increased equity capital. Finally, this analysis presumes that covered clearing agencies will choose to comply with the requirements in proposed Rule 17Ad–22(e)(15)(iii) at the lower bound of six months' operating expenses.

Clearing agencies that issue equity in order to satisfy the new requirements would additionally face costs related to issuance. The Commission preliminarily recognizes that the cost of maintaining additional equity resembles an insurance premium against the losses associated by market disruption in the absence of clearing services.

⁷⁴¹ In the case of DTCC, to obtain an estimate of annual operating expense, the Commission made minor adjustments to the total expense by excluding expenses not related to DTCC's core operations, since its annual income statement does not explicitly show the operating expense.

⁷⁴² The Commission notes that these two cases are provided as estimates of cash and cash equivalents funded by equity for existing covered clearing agencies for limited purposes of the economic analysis but are not methods the Commission would necessarily accept if used by a covered clearing agency to comply with proposed Rule 17Ad–22(e)(15). Nor should the two cases presented be viewed as interpretive guidance regarding proposed Rule 17Ad–22(e)(15).

⁷⁴³ For example, in Case 2, for DTC we arrive at a pro-rata allocation of cash by computing the ratio of Average Equity to the sum of Average Equity and Average Liabilities ($282/3646 = 7.73\%$), and applying this to Average Cash and Cash Equivalents ($7.73\% \times 3151 = 243.71$) to arrive at a proxy of the level of liquid net assets funded by equity.

⁷⁴⁴ The figures in Table 2 are based on financial data taken from the 2008–2012 annual reports of DTC, FICC, ICEEU, NSCC, and OCC. The Commission notes that these figures are presented

for the limited purposes of conducting this economic analysis and do not represent methods the Commission would necessarily accept if used by a covered clearing agency to comply with proposed Rule 17Ad–22(e)(15).

⁷⁴⁵ See Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 *Am. Econ. Rev.* 261 (1958) (showing the irrelevance of capital structure in perfect markets).

⁷⁴⁶ See Eugene F. Fama & Kenneth R. French, *The Cross-Section of Expected Stock Returns*, 47 *J. Fin.* 427 (1992). For CME, the Commission used monthly return data from January 2003 to December 2012, and for ICE, from December 2005 to December 2012.

The Commission calculated this data using Daily/Monthly U.S. Stock Files © 2012 Center for Research in Security Prices (CRSP), The University of Chicago Booth School of Business, and Thomson Reuters Datastream.

⁷⁴⁷ The Commission based this estimate on the 2012 financial statements for DTC, CME, FICC, ICE, NSCC, and OCC. To ensure comparability, the Commission estimated leverage ratios for each of these clearing agencies by adjusting assets for clearing and guaranty funds and dividing by

shareholders' equity. While DTC, NSCC, FICC, ICE, and CME all have estimated leverage ratios of between 1 and 2, the Commission computed a higher leverage ratio of 5 for OCC. As a result, the Commission computed OCC's cost of capital by first "unlevering" CME's estimated beta of 1.14 using 2012 financial statement information to arrive at an unlevered beta of 0.87 and leveraging this using OCC's 2012 financial statement information to arrive at a levered beta of 3.36. Finally, the Commission applied the current Fama-French monthly risk premium at a 10-year horizon, annualized, and added the current 10 year risk-free rate to arrive at a levered cost of equity of approximately 26% for OCC.

⁷⁴⁸ See e.g., Anat R. Admati, Peter M. DeMarzo, Martin F. Hellwig & Paul Pfleiderer, *Fallacies, Irrelevant Facts, and Myths in the Discussion of Capital Regulation: Why Bank Equity is Not Expensive* (Working Paper, Mar. 23, 2011), available at http://www.coll.mpg.de/pdf_dat/2010_42online.pdf (addressing the statement that "[i]ncreased bank equity requirements increase the funding costs for banks because they must use more equity, which has a higher required return").

xi. Proposed Rule 17Ad–22(e)(16):
Custody and Investment Risks

Proposed Rule 17Ad–22(e)(16) requires a covered clearing agency to have policies and procedures reasonably designed to safeguard both their own assets as well as the assets of participants, broadening the requirement applicable to registered clearing agencies in Rule 17Ad–22(d)(3) to the protection of participants' assets.

The Commission preliminarily believes that this may have benefits in terms of protecting against systemic risk, to the extent that covered clearing agencies to this point have treated their own assets differently by applying greater safeguards to those assets than with respect to assets of their members and members' clients. Protection of member assets is important to cleared markets because, for example, the assets of a member in default serve as margin and represent liquidity supplies that a covered clearing agency may access to cover losses. If covered clearing agencies can quickly access these liquidity sources, they may be able to limit losses to non-defaulting members.

Participants may benefit from proposed Rule 17Ad–22(e)(16) in other ways. Requiring a covered clearing agency's policies and procedures to safeguard its assets and participant assets and to invest in assets with minimal credit, liquidity, and market risk may reduce uncertainty in the value of participant assets and participants' exposure to mutualized losses. This may allow participants to deploy their own capital more efficiently. Furthermore, easy access to their own capital enables members to more freely terminate their participation in covered clearing agencies.

Based on its supervisory experience, the Commission preliminarily believes that current practices at covered clearing agencies meet the requirements under proposed Rule 17Ad–22(e)(16) in most cases, so the additional costs and benefits flowing from these requirements would be generally limited to registered clearing agencies that may enter the set of covered clearing agencies in the future.

xii. Proposed Rule 17Ad–22(e)(17):
Operational Risk Management

Because, as noted above, proposed Rule 17Ad–22(e)(17) would require substantially the same set of policies and procedures as Rule 17Ad–22(d)(4),⁷⁴⁹ the Commission preliminarily believes that proposed

Rule 17Ad–22(e)(17) would likely impose limited material additional costs on covered clearing agencies and produce limited benefits, in line with the general economic considerations discussed in Part IV.C.1.

xiii. Proposed Rules 17Ad–22(e)(18)
Through (20): Membership
Requirements, Tiered Participation, and
Linkages

As discussed earlier, covered clearing agencies play an important role in the markets they serve. They often enjoy a central place in financial networks that enables risk sharing, but may also enable them to serve as conduits for the transmission of risk throughout the financial system. Proposed Rules (18) through (20) require covered clearing agencies to have policies and procedures reasonably designed to explicitly consider and manage the risks associated with the particular characteristics of their network of direct members, the broader community of customers, and other parties that rely on the services provided by the covered clearing agencies or other partners that the covered clearing agency is connected to through relevant linkages. The Commission preliminarily believes that these efforts carry benefits insofar as they reduce the extent to which covered clearing agencies may impose negative externalities on financial markets.

As economies of scale contribute to the business dynamics of clearing and settlement, there is often only one clearing agency or a small number of clearing agencies for a particular class of security. Consequently, membership in a clearing agency may influence competitive dynamics between members and indirect participants, such as intermediaries, in cleared markets. Members and indirect participants may compete for the same set of customers, but indirect participants must have relationships with members to access clearing services. Members, therefore, may have incentives in place to extract economic rents from indirect participants by imposing higher fees or restricting access to clearing services.

Permitting fair and open access to clearing agencies and their services may promote competition among market participants and may result in lower costs and efficient clearing and settlement services. Open access to clearing agencies may reduce the likelihood that credit and liquidity risk become concentrated among a small number of clearing members, each of which retain a large number of indirect participants through tiered arrangements. Further, links between

clearing agencies may facilitate risk management across multiple security classes and improve the efficiency of collateral arrangements.

(1) Proposed Rule 17Ad–22(e)(18):
Member Requirements

While fair and open access to clearing agencies may promote competition and enhance the efficiency of clearing and settlement services, these improvements should not come at the expense of prudent risk management. The soundness of clearing members contributes directly to the soundness of a clearing agency and mutualization of losses within clearing agencies expose each clearing member to the default risk of every other clearing member. Accordingly, it is important for clearing agencies to control and effectively manage the risks to which they are exposed by their direct and indirect participants by establishing risk-related requirements for participation.

Based on its supervisory experience, the Commission preliminarily believes that current practices among most covered clearing agencies involve a mix of objective financial and business requirements stipulated in publicly-available rulebooks and discretion exercised by the covered clearing agency. As a result and based on its supervisory experience, the Commission preliminarily believes that some changes to policies and procedures at covered clearing agencies may be required under the proposed rule.

(2) Proposed Rule 17Ad–22(e)(19):
Tiered Participation Arrangements

The Commission preliminarily believes that proposed Rule 17Ad–22(e)(19) may improve covered clearing agencies' ability to manage its exposure to market participants that are not clearing members, but access payment, clearing, or settlement facilities through their relationships with clearing members. A covered clearing agency that is able to effectively manage its exposure to its members but fails to identify, monitor, and manage its exposures to non-member firms may overlook dependencies that are critical to the stability of cleared markets. This is particularly true if indirect participants in the covered clearing agency are large and might potentially precipitate the default of one or more direct members.

The data necessary to compute summary statistics that would be helpful in quantifying the costs and benefits of the proposed rule, including those that would indicate the size of indirect participants and the volume of transactions in which they are involved,

⁷⁴⁹ See *supra* Part 0 (discussing the full set of requirements under proposed Rule 17Ad–22(e)(17)); see also 17 CFR 240.17Ad–22(d)(4).

are not available. Nevertheless, the Commission is sensitive to the fact that costs associated with the proposed rules may result in concentration of clearing services among fewer clearing members. Part of this process of consolidation may mean an increase in the volume of trading activity that involves indirect members, making identification of risks associated with indirect members even more critical. Based on its supervisory experience, however, the Commission preliminarily believes that certain covered clearing agencies already have policies and procedures in place that would satisfy the requirements of the proposed rule even in the absence of such explicit requirements under existing rules. Costs and benefits from the proposed rule would come from those other registered clearing agencies that require updates to their policies and procedures to come into compliance with the proposed rule.

The Commission is sensitive to the fact that indirect participants play a key role in maintaining competition in markets for intermediation of trading in securities insofar as they offer investors a broader choice of intermediaries to deal with in centrally cleared and settled securities markets. If elements of policies and procedures under this rule make indirect participation marginally more costly, then transactions costs for investors may increase.

(3) Proposed Rule 17Ad-22(e)(20): Links

Links between clearing agencies and their members are only one way that clearing agencies interface with the financial system. A clearing agency may also establish links with other clearing agencies and FMUs through a set of contractual and operational arrangements. For a clearing agency, the primary purpose of establishing a link would be to expand its clearing and settlement services to additional financial instruments, markets, and institutions. Established links among clearing agencies and FMUs may enable direct and indirect market participants to have access to a broader spectrum of clearing and settlement services.

Sound linkages between clearing agencies that provide CCP services may also provide their customers with more efficient collateral arrangements and cross-margining benefits. Cross-margining potentially relaxes liquidity constraints in the financial system by reducing total required margin collateral. Resources that would otherwise be posted as margin may be allocated to more productive investment opportunities.

A clearing agency that establishes a link or multiple links may also impose

costs on participants in markets it clears by indirectly exposing them to systemic risk from linked entities. The Commission acknowledges that clearing agencies that form linkages may be exposed to additional risks, including credit and liquidity risks, as a consequence of these links. Links may, however, produce benefits for members to the extent that diversification and hedging across their combined portfolio reduces their margin requirements. At the same time, because such an agreement requires the linked clearing agencies to each guarantee cross-margining participants' obligations to the other clearing agency, cross-margining potentially exposes members of one clearing agency to default risk from members of the other.

By requiring that covered clearing agencies have policies and procedures reasonably designed to identify, monitor, and manage risks related to any link, proposed Rule 17Ad-22(e)(20), like Rule 17Ad-22(d)(7), reduces the likelihood that such links serve as channels for systemic risk transmission. Because proposed Rule 17Ad-22(e)(20) differs only marginally from Rule 17Ad-22(d)(7), the Commission preliminarily believes that the costs and benefits flowing from the proposed rule will be incremental, to the extent that the additional specificity in proposed Rule 17Ad-22(e)(20) causes covered clearing agencies to modify current practices. The Commission has aggregated these costs below.

xiv. Proposed Rule 17Ad-22(e)(21): Efficiency and Effectiveness

Proposed Rule 17Ad-22(e)(21) would impose on covered clearing agencies requirements in addition to those currently applied to registered clearing agencies under Rule 17Ad-22(d)(6) by also requiring covered clearing agencies to have policies and procedures that ensure that a covered clearing agency's management review efficiency and effectiveness in four key areas:

- Efficiency and effectiveness in clearing and settlement arrangements may reduce participants' transaction costs and enhance liquidity by reducing the amount of collateral that customers must provide for transactions and the opportunity cost associated with providing such collateral. Where appropriate, net settlement arrangements can reduce collateral requirements. Similarly, clearing arrangements that include a broad scope of products enable clearing members to take advantage of netting efficiencies across positions.
- Efficient and effective operating structures, including risk management

policies, procedures, and systems, may reduce the likelihood of failures that may lead to impairment of a clearing agency's capacity to complete settlement and interfering with its ability to monitor and manage credit exposures.

- An efficient scope of products that a clearing agency clears, settles, or records may provide its participants and customers with more efficient collateral arrangements and cross-margining benefits that ultimately reduce transaction costs and improve liquidity in cleared markets.

- Efficient and effective use of technology and communication procedures facilitates effective payment, clearing and settlement, and recordkeeping.

The Commission preliminarily believes that requirements related to efficient operation of covered clearing agencies are appropriate given the market power enjoyed by these entities, as discussed in Part IV.C.1.d. Limited competition in the market for clearing services may blunt incentives for covered clearing agencies to cost effectively provide high quality services to market participants in the absence of regulation.

Based on its supervisory experience, the Commission preliminarily believes that some covered clearing agencies would be required to make updates to their policies and procedures as a result of the proposed rule. As a result, the Commission expects incremental costs and benefits to flow from the proposed rule only to the extent that this additional specificity causes covered clearing agencies to modify current practices.

xv. Proposed Rule 17Ad-22(e)(22): Communication Procedures and Standards

Based on its supervisory experience, the Commission preliminarily believes that some changes to policies and procedures would be necessary to meet requirements under proposed Rule 17Ad-22(e)(22).⁷⁵⁰ These costs are included as a part of implementation costs, as discussed below. However, the Commission understands that covered clearing agencies already accommodate internationally accepted communication procedures and standards and preliminarily anticipates only incremental costs resulting from the proposed rule, in addition to the above discussed benefits. Registered clearing

⁷⁵⁰ See *supra* Parts 0 and 0 (discussing the requirements for communication procedures and standards under Rule 17Ad-22(e)(22) and providing the rule text, respectively).

agencies that may enter into the set of covered clearing agencies in the future may need to conform their practices to internationally accepted communication procedures and standards, as well as adopt new policies and procedures as a result of the proposed rule, resulting in more substantial costs.

xvi. Proposed Rule 17Ad–22(e)(23): Disclosure of Rules, Key Procedures, and Market Data

Enhanced disclosure may also improve the efficiency of transactions in cleared products and improve financial stability more generally by improving the ability of members of covered clearing agencies to manage risks and assess costs. Additional information would reduce the potential for uncertainty on the part of clearing members regarding their obligations to covered clearing agencies. Proposed Rule 17Ad–22(e)(23) requires a covered clearing agency to establish, implement, maintain, and enforce written policies and procedures reasonably designed to require specific disclosures. As in Rules 17Ad–22(d)(9) and (11), covered clearing agencies would be required under proposed Rule 17Ad–22(e)(23) to disclose default procedures to the public and disclose sufficient information to participants to allow them to manage the risks, fees, and other material costs associated with membership.

Under proposed Rule 17Ad–22(e)(23), a covered clearing agency must establish, implement, maintain and enforce written policies and procedures reasonably designed to update, on a biannual basis, public disclosures that describe the covered clearing agency's market and activities, along with information about the agency's legal, governance, risk management, and operating frameworks, including specifically covering material changes since the last disclosure, a general background on the covered clearing agency, a rule-by-rule summary of compliance with proposed Rules 17Ad–22(e)(1) through (22), and an executive summary. The proposed rule adds a new requirement, relative to existing requirements for registered clearing agencies under Rule 17Ad–22(d)(9), to update the disclosure biannually and to include, among other things, specific data elements, including details about system design and operations, transaction values and volumes, average intraday exposure to participants, and statistics on operational reliability.

Additional transparency may have benefits for participants and cleared markets more generally. For example, if information about the systems that

support a covered clearing agency is public, investors may be more certain that the market served by this agency is less prone to disruption and more accommodating of trade. Furthermore, public disclosure of detailed operating data may facilitate evaluation of each covered clearing agency's operating record by market participants. Further, under proposed Rule 17Ad–22(e)(23)(iv), these disclosures would be made about specific categories that potentially facilitate comparisons between covered clearing agencies. Additional availability of information on operations may increase the likelihood that clearing agencies compete to win market share from participants that value operational stability. This additional market discipline may provide additional incentives for covered clearing agencies to maintain reliability. Finally, updating the public disclosure every two years or more frequently following certain changes as required pursuant to proposed Rule 17Ad–22(e)(23)(v) would support the benefits of enhanced public disclosures by ensuring that information provided to the public remains up-to-date. The Commission preliminarily believes this would reduce the likelihood that market participants are forced to evaluate covered clearing agencies on the basis of stale data.

Clearing members, in particular, may benefit from additional disclosure of risk management and governance arrangements. These details potentially have significant bearing on clearing members' risk management because they may remove uncertainty surrounding members' potential obligations to a covered clearing agency. In certain circumstances, additional disclosures may reveal to members that the expected costs of membership exceed the expected benefits of membership, and that exit from the clearing agency may be privately optimal. In addition to the costs of concentration among members discussed in earlier sections, the Commission also recognizes the potential for systemic benefits from termination. Member exit on the basis of more precise information may reduce the risk posed to other financial market participants by members who, given additional information, might prefer to terminate their membership, due to an inability to manage the risks to which a covered clearing agency exposes them. While exit from clearing agencies may have consequences for competition among clearing members, the Commission preliminarily believes that encouraging the participation of firms

that are not able to bear the risks of membership is not an appropriate means of mitigating the effects of market power on participants in cleared markets.

Based on its supervisory experience, the Commission preliminarily believes that some covered clearing agencies will require changes to policies and procedures as a result of the proposed rules. Compliance costs associated with changes to policies and procedures, biannual review and disclosure of additional data are included in implementation costs, below.

b. Proposed Rule 17Ab2–2

Proposed Rule 17Ad–22(e) would subject covered clearing agencies to requirements that are in many instances more specific than requirements under Rule 17Ad–22(d) and in some cases produce new obligations to establish, implement, maintain and enforce written policies and procedures reasonably designed to test, report, and disclose key elements of a covered clearing agency's performance, risk management, and operations.

Proposed Rule 17Ab2–2 provides procedures for the Commission to determine on its own initiative, or upon voluntary application by a registered clearing agency, whether a registered clearing agency is a covered clearing agency and therefore is subject to proposed Rule 17Ad–22(e). It also provides procedures for the Commission to determine whether a covered clearing agency is systemically important in multiple jurisdictions or has a complex risk profile and therefore should be subject to stricter risk management standards under proposed Rule 17Ad–22(e).

Proposed Rule 17Ab2–2(a) provides procedures for the Commission to determine whether a registered clearing agency that is otherwise not a designated clearing agency or a complex risk profile clearing agency is a covered clearing agency on the basis of the products it clears or other characteristics the Commission may deem appropriate under the circumstances. While the Commission preliminarily believes the current scope of proposed Rule 17Ad–22(e) is appropriate,⁷⁵¹ proposed Rule 17Ab2–2(a) would provide the Commission with latitude in adjusting the scope of proposed Rule 17Ad–22(e) in response to financial innovation and changing economic circumstances. Proposed Rule 17Ab2–2(a) contemplates voluntary

⁷⁵¹ See *supra* Part 0 (discussing the appropriateness of the proposed scope of Rule 17Ad–22(e)).

application of registered clearing agencies to become covered clearing agencies.

Proposed Rule 17Ab2–2(b) includes criteria the Commission may consider in determining whether a covered clearing agency is systemically important in multiple jurisdictions. Two of these criteria are based on input from a set of other bodies comprised of FSOC and regulators in other jurisdictions. As a result, it is possible that the flow of costs and benefits from proposed Rule 17Ad–22(e) may be partially determined by the decisions of other regulatory bodies.

Proposed Rule 17Ab2–2(c), by contrast, suggests characteristics of the financial products that a clearing agency clears as a basis upon which the Commission may determine that a clearing agency's activity has a complex risk profile.

The impact of proposed rules that determine the application of enhanced requirements could have direct costs on registered clearing agencies in the form of legal or consulting costs incurred as a result of seeking a determination from the Commission. In instances where these clearing agencies choose to apply to the Commission for status as a covered clearing agency under proposed Rule 17Ab2–2(a), the Commission preliminarily believes that a registered clearing agency's voluntary application would suggest that the applicant's private benefits from regulation under proposed Rule 17Ad–22(e) justify its costs.

Quantifiable costs related to determinations under proposed Rule 17Ab2–2 are noted in Part IV.C.3.d.

Indirect effects of the determination process may have important economic effects on the ultimate volume of clearing activity, beyond the economic effects of the proposed requirements themselves. An important feature of proposed Rule 17Ab2–2 is providing transparency for the determinations process. On one hand, transparency may allow clearing agencies to plan for new obligations under proposed Rule 17Ad–22(e); on the other, transparency may allow clearing agencies to restructure their business to avoid falling within the scope of proposed Rule 17Ad–22(e).

To the extent that proposed Rule 17Ad–22(e), if adopted as proposed, may increase costs relative to their peers for covered clearing agencies, clearing agencies whose activities have a more complex risk profile, and clearing agencies systemically important in multiple jurisdictions, clearing agencies may have incentives to restructure their businesses strategically to avoid these Commission determinations or

otherwise exit any services made prohibitively expensive by such determinations. Such potential consequential effects would be among the considerations for the Commission to review in connection with any specific decision under proposed Rule 17Ab2–2. Restructuring may involve spinning off business lines into separate entities, limiting the scope of clearing activities to certain markets, or limiting the scale of clearing activities within a single market.⁷⁵²

Any one of these responses could result in inefficiencies. As suggested in Part IV.C.2.b, registered clearing agencies may incur costs as a result of attempts to restructure. Clearing agencies that break up along product lines or fail to consolidate when consolidation is efficient may fail to take advantage of economies of scope and result in inefficient use of collateral.⁷⁵³ Similarly, clearing agencies that limit their scale may provide lower levels of clearing services to the markets that they serve.

c. Proposed Rule 17Ad–22(f)

Proposed Rule 17Ad–22(f) includes a provision that specifies Commission authority over designated clearing agencies for which it is the supervisory agency. Since this provision codifies existing statutory authority, the Commission does not anticipate any economic effects from this proposed rule.

d. Quantifiable Costs and Benefits

As discussed above, the proposed amendments to Rule 17Ad–22 and proposed Rule 17Ab2–2 would impose certain costs on covered clearing agencies. As discussed in Part IV.C.3.a.ii, if a covered clearing agency is required to recruit new directors, the Commission preliminarily estimates a cost per director of \$73,000.⁷⁵⁴ As discussed in Part IV.C.3.a.iv(4), the Commission preliminarily estimates costs associated with liquidity resources under proposed Rules 17Ad–22(e)(7) and (a)(15) would likely fall between \$133 million and \$225 million per year across all covered clearing agencies. As discussed in Part IV.C.3.a.iv(5), the Commission preliminarily believes that startup costs related to financial risk management systems for existing

covered clearing agencies, related to new testing and model validation requirements to be between \$5 million to \$25 million. The Commission also estimates a lower bound on ongoing costs related to these requirements of \$1 million per year. If covered clearing agencies were to hire external consultants for the purposes of performing model validation required under proposed Rules 17Ad–22(e)(4) and (7) through policies and procedures, the Commission preliminarily estimates the ongoing cost associated with hiring such consultants would be about \$4,388,160 in the aggregate.⁷⁵⁵ As discussed in Part IV.C.3.a.x, the Commission expects quantifiable economic costs as a result of proposed Rule 17Ad–22(e)(15) to be between \$16 million and \$50 million per year across covered clearing agencies.

In addition, proposed Rules 17Ad–22(e)(3), (4), (6), (7), (15) and (21) all include elements of review by either a covered clearing agency's board or its management on an ongoing basis. The Commission preliminarily estimates the cost of ongoing review for these proposed rules at approximately \$39,312 per year.⁷⁵⁶ The proposed rules would also impose certain implementation burdens and related costs on covered clearing agencies.⁷⁵⁷ These costs generally include assessment costs to determine compliance with the proposed rules and

⁷⁵⁵ See *supra* Part 0, in particular note 734.

⁷⁵⁶ To monetize the cost of board review, the Commission used a recent report by Bloomberg stating that the average director works 250 hours and earns \$251,000, resulting in an estimated \$1000 per hour for board review. As a proxy for the cost of management review, the Commission is estimating \$457 per hour, based upon the Director of Compliance cost data from the SIFMA table, see *infra* note 778. The Commission estimates the total cost of review for each clearing agency as follows: ((Board Review for 32 hours at \$1000 per hour) + (Management Review for 16 hours at \$457 per hour)) = \$39,312. The Commission requests comment on this estimate.

⁷⁵⁷ To monetize the internal costs the Commission staff used data from the SIFMA publications, Management and Professional Earnings in the Security Industry—2012, and Office Salaries in the Securities Industry—2012, modified by the Commission staff to account for an 1800 hour work-year and multiplied by 5.35 (professionals) or 2.93 (office) to account for bonuses, firm size, employee benefits and overhead. Commission staff also estimated an hourly rate for a Chief Financial Officer. The Web site www.salary.com reports that median CFO annual salaries in 2012 were \$307,554. A Grant Thornton LLP survey estimated that in 2012 public company CFOs received an average annual salary of \$286,500. Using an approximate midpoint of these two estimates of \$300,000 per year, and dividing by an 1800-hour work year and multiplying by the 5.35 factor which normally is used to include benefits but here is used as an approximation to offset the fact that New York salaries are typically higher than the rest of the country, the result is \$892 per hour. The Commission requests comment on this estimate.

⁷⁵² See Exchange Act Release No. 34–63107 (Oct. 14, 2010), 75 FR 65881, 65919 & n.206 (Oct. 26, 2010).

⁷⁵³ See, e.g., Darrell Duffie & Haoxiang Zhu, Does a Central Clearing Counterparty Reduce Counterparty Risk?, 1 Rev. Asset Pricing Stud. 74 (2011) (addressing potential inefficiencies resulting from fragmented clearing along product lines).

⁷⁵⁴ See *supra* note 705.

costs related to new policies and procedures and updates to existing policies and procedures required by the proposed rules. In Part III, the Commission estimated the burdens of these implementation requirements for covered clearing agencies.

For a new entrant into the set of covered clearing agencies from the set of registered clearing agencies, the Commission preliminarily estimates the startup compliance costs associated with policies and procedures to be \$592,215,⁷⁵⁸ and compliance costs associated with the determinations process under proposed Rule 17Ab2–2 to be \$9,148.⁷⁵⁹ Based on its supervisory experience, the Commission preliminarily believes that in many cases registered clearing agencies are already in compliance with many of the requirements included in the proposed rules, so this cost represents an upper bound on upfront costs. Conditioned on its current understanding of current market practice at covered clearing agencies, the Commission preliminarily estimates that the total costs across all existing covered clearing agencies will be \$4,032,720.⁷⁶⁰ The Commission preliminarily estimates that in the aggregate existing covered clearing agencies would be subject to ongoing costs associated with the proposed rule in the amount of approximately \$801,980 per year.⁷⁶¹

⁷⁵⁸ The total initial cost for an entrant that is not a CSD and does engage in activities with a more complex risk profile was calculated as follows: ((Assistant General Counsel for 428 hours at \$467 per hour) + (Compliance Attorney for 365 hours at \$310 per hour) + (Administrative Assistant for 2 hours at \$72 per hour) + (Computer Operations Department Manager for 300 hours at \$361 per hour) + (Senior Business Analyst for 85 hours at \$245 per hour) + (Senior Risk Management Specialist for 114 hours at \$249 per hour) + (Chief Compliance Officer for 102 hours at \$441 per hour) + (Senior Programmer for 53 hours at \$282 per hour) + (Chief Financial Officer for 50 hours at \$892 per hour) + (Financial Analyst for 70 hours at \$245 per hour)) = \$592,215.

⁷⁵⁹ The total cost associated with determinations under proposed Rule 17Ab2–2 was calculated as follows: ((Assistant General Counsel for 2 hours at \$467 per hour) + (Compliance Attorney for 4 hours at \$310 per hour) + (Outside Counsel for 6 hours at \$400 per hour)) × 2 registered clearing agencies = \$9,148.

⁷⁶⁰ The total initial cost was calculated as follows: ((Assistant General Counsel for 2,906 hours at \$467 per hour) + (Compliance Attorney for 2,475 hours at \$310 per hour) + (Administrative Assistant for 14 hours at \$72 per hour) + (Computer Operations Department Manager for 2,030 hours at \$361 per hour) + (Senior Business Analyst for 565 hours at \$245 per hour) + (Senior Risk Management Specialist for 773 hours at \$249 per hour) + (Chief Compliance Officer for 699 hours at \$441 per hour) + (Senior Programmer for 361 hours at \$282 per hour) + (Chief Financial Officer for 350 hours at \$892 per hour) + (Financial Analyst for 490 hours at \$245 per hour) + (Intermediate Accountant for 15 hours at \$155 per hour)) = \$4,032,720.

⁷⁶¹ The total ongoing cost was calculated as follows: ((Compliance Attorney for 1,851 hours at

A benefit of the proposed rules that the Commission is able to quantify is the impact of QCCP status of OCC to non-U.S. bank clearing members at OCC. This benefit comes as a result of lower capital requirements against exposures to QCCPs relative to non-qualifying CCPs. In Part IV.C.1.e, the Commission provided an estimate of the upper bound of this benefit, \$600 million per year, or 0.60% of the aggregate 2012 net income reported by bank clearing members at OCC. The Commission preliminarily believes that the actual benefits flowing from QCCP status would likely be higher due to benefits for foreign bank members of FICC and ICEEU, in addition to the benefits with respect to OCC discussed above.⁷⁶²

The Commission preliminarily believes that the proposed rules will result in an increase in financial stability insofar as they result in minimum standards at covered clearing agencies that are higher than those standards implied by current practices at covered clearing agencies. Some of this increased stability may come as a result of lower activity as the proposed rules cause participants to internalize a greater proportion of the costs that their activity imposes on the financial system, reducing the costs of default, conditional on a default event occurring. Increased stability may also come as a result of higher risk management standards at covered clearing agencies that effectively lower the probability that either covered clearing agencies or their members default.

The Commission preliminarily believes that clearance and settlement of securities and security-based swaps is fundamental to the stability of financial markets. As discussed above, clearing agencies may not fully consider the costs they could impose on financial market participants.⁷⁶³ As a result of the potential negative externalities

\$310 per hour) + (Administrative Assistant for 137 hours at \$72 per hour) + (Senior Business Analyst for 151 hours at \$245 per hour) + (Senior Risk Management Specialist for 70 hours at \$249 per hour) + (Risk Management Specialist for 1,251 hours at \$131 per hour)) = \$801,980.

⁷⁶² See *supra* note 686 and accompanying text.

⁷⁶³ See Duffie, Li & Lubke, *supra* note 563 (noting that the failure of a CCP could suddenly expose many major market participants to losses); see also Cecchetti, Gyntelberg & Hollanders, *supra* note 19 (“[A] CCP concentrates counterparty and operational risks and the responsibilities for risk management. Therefore it is critical that CCPs have both effective risk control and adequate financial resources.”); *supra* note 278 and accompanying text (asserting that delays and breakdowns in the payments and clearance process and the perception that the clearing system might not be able to meet obligations may have contributed to price declines during the October 20, 1987 market crash).

associated with their activities, enhanced risk management standards are particularly important for those clearing agencies that pose the greatest risk to financial markets and the U.S. financial system.

D. Request for Comments

The Commission generally requests comment about its preliminary analysis of the economic effects of the proposed rules and any qualitative and quantitative data that would facilitate an evaluation and assessment of the economic effects of this proposal. In addition, the Commission requests comment on the following specific issues:

- Has the Commission appropriately identified the relevant costs and benefits associated with each requirement under proposed Rule 17Ad–22(e)? Why or why not?

- Are there any provisions of proposed Rule 17Ad–22(e) for which the costs of enhanced risk management standards appear inappropriate relative to the benefits of such standards, particularly given existing requirements under Rule 17Ad–22(d)? Please explain.

- Would particular provisions of proposed Rule 17Ad–22(e) improve or diminish competition between covered clearing agencies? Which provisions are likely to have such effects and through what transmission channels?

- Would the scope of proposed Rule 17Ad–22(e) have implications for competition between covered clearing agencies and registered clearing agencies that are not covered clearing agencies?

- Would particular provisions of proposed Rule 17Ad–22(e) improve or diminish competition between members of covered clearing agencies? Are there any provisions that would allow a subset of members to compete on better terms than other members?

- How would the effects of QCCP status will be allocated across members? Can market participants provide any qualitative or quantitative data to help the Commission evaluate the effects of QCCP status on clearing members and any heterogeneity in trade exposures and default fund exposures to covered clearing agencies across bank and non-bank clearing members?

- Would bank clearing members to be constrained by the Basel III capital requirements? Do bank clearing members typically target tier one or total capital ratios as a business practice?

- In areas where existing requirements under Rule 17Ad–22(d) could be viewed as being consistent with the PFMI, and so could potentially earn QCCP status for covered clearing

agencies, do the costs of additional requirements under proposed Rule 17Ad-22(e) appear appropriate relative to benefits of these requirements, aside from QCCP status? Please explain.

- Does the Commission's proposed definition of qualifying liquid resources adequately reflect the ability with which covered clearing agency assets may be used to meet funding obligations? Has the Commission adequately assessed the costs and benefits of requiring funding arrangements before considering non-cash resources "qualifying"?

- What would be the potential costs and benefits of requiring covered clearing agencies to hold liquid net assets in accordance with proposed Rule 17Ad-22(e)(15)? Can you provide qualitative and quantitative data to aid the Commission in evaluating these potential costs and benefits?

- Has the Commission adequately assessed the risks posed by indirect participation at covered clearing agencies? Can you provide qualitative and quantitative data to aid the Commission in evaluating the level of indirect participation in cleared markets, the heterogeneity of indirect participation across clearing members and the implications for networks of exposures in cleared markets?

V. Regulatory Flexibility Act Certification

The Regulatory Flexibility Act ("RFA") requires the Commission, in promulgating rules, to consider the impact of those rules on small entities.⁷⁶⁴ Section 603(a) of the Administrative Procedure Act,⁷⁶⁵ as amended by the RFA, generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules to determine the impact of such rulemaking on "small entities."⁷⁶⁶ Section 605(b) of the RFA states that this requirement shall not apply to any proposed rule which, if adopted, would not have a significant economic impact on a substantial number of small entities.⁷⁶⁷

A. Registered Clearing Agencies

The proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2 would apply to covered clearing agencies, which would include

registered clearing agencies that are designated clearing agencies, complex risk profile clearing agencies, or clearing agencies that otherwise have been determined to be covered clearing agencies by the Commission. For the purposes of Commission rulemaking and as applicable to the proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2, a small entity includes, when used with reference to a clearing agency, a clearing agency that (i) compared, cleared, and settled less than \$500 million in securities transactions during the preceding fiscal year, (ii) had less than \$200 million of funds and securities in its custody or control at all times during the preceding fiscal year (or at any time that it has been in business, if shorter), and (iii) is not affiliated with any person (other than a natural person) that is not a small business or small organization.⁷⁶⁸

Based on the Commission's existing information about the clearing agencies currently registered with the Commission,⁷⁶⁹ the Commission preliminarily believes that such entities exceed the thresholds defining "small entities" set out above. While other clearing agencies may emerge and seek to register as clearing agencies, the Commission preliminarily does not believe that any such entities would be "small entities" as defined in Exchange Act Rule 0-10.⁷⁷⁰ In any case, clearing

⁷⁶⁸ See 17 CFR 240.0-10(d).

⁷⁶⁹ In 2012, DTCC processed \$1.6 quadrillion in financial transactions, subsidiary DTC settled \$110.3 trillion of securities and held securities valued at \$37.2 trillion, subsidiary NSCC processed an average daily value of \$742.7 billion in equity securities, subsidiary FICC cleared \$1.116 quadrillion in government securities, and FICC's Mortgage-Backed Securities Division cleared \$104 trillion of transactions in agency mortgage-backed securities. See DTCC, 2012 Annual Report, available at <http://www.dtcc.com/about/annual-report.aspx> and <http://www.dtcc.com/annuals/2012/br-settlement-and-asset-services.html>; FSOC, 2013 Annual Report, *supra* note 39, at 99.

In addition, OCC cleared more than 4 billion contracts and held margin of \$78.8 billion at the end of 2012. See OCC, 2012 Annual Report, available at http://www.optionsclearing.com/components/docs/about/annual-reports/occ_2012_annual_report.pdf. CME Group had total contract volume of 2.89 billion contracts (in round turn trades) with a total notional value of \$806 trillion. See CME Group, 2012 Annual Report, available at http://files.shareholder.com/downloads/CME/2635449816x0x653543/02DB7C7F-ACF0-4D73-9AD7-1ACCEF68559A/CME_Group_2012_Annual_Report.pdf. ICE and ICEEU together cleared CDS with a total notional value of \$10.24 trillion. See Intercontinental Exchange, Inc., 2012 Annual Report, available at http://files.shareholder.com/downloads/ICE/2623237906x0x649669/DFB49A9C-152C-4287-848C-7CCDDA42D61E/ICE_2012_Annual_Report_FINAL.pdf.

⁷⁷⁰ See 17 CFR 240.0-10(d). The Commission based this determination on its review of public sources of financial information about registered clearing agencies and lifecycle event service providers for OTC derivatives.

agencies can only become subject to the new requirements under proposed Rule 17Ad-22(e) should they meet the definition of a covered clearing agency, as described above. Accordingly, the Commission preliminarily believes that any such registered clearing agencies will exceed the thresholds for "small entities" set forth in Exchange Act Rule 0-10.

B. Certification

For the reasons described above, the Commission certifies that the proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2 would not have a significant economic impact on a substantial number of small entities for purposes of the RFA. The Commission requests comment regarding this certification. The Commission requests that commenters describe the nature of any impact on small entities, including clearing agencies and counterparties to security and security-based swap transactions, and provide empirical data to support the extent of the impact.

VI. Small Business Regulatory Enforcement Fairness Act

Under the Small Business Regulatory Enforcement Fairness Act of 1996,⁷⁷¹ a rule is considered "major" where, if adopted, it results or is likely to result in (i) an annual effect on the economy of \$100 million or more (either in the form of an increase or a decrease); (ii) a major increase in costs or prices for consumers or individual industries; or (iii) significant adverse effect on competition, investment, or innovation. The Commission requests comment on the potential impact of the proposed amendments to Rule 17Ad-22 and proposed Rule 17Ab2-2 on the economy on an annual basis, any potential increase in costs or prices for consumers or individual industries, and any potential effect on competition, investment, or innovation. Commenters are requested to provide empirical data and other factual support for their views to the extent possible.

VII. Statutory Authority and Text of Amended Rule 17Ad-22 and Proposed Rule 17Ab2-2

Pursuant to the Exchange Act, particularly Section 17A thereof, 15 U.S.C. 78q-1, and Section 805 of the Clearing Supervision Act, 12 U.S.C. 5464, the Commission proposes to amend Rule 17Ad-22 and proposes new Rule 17Ab2-2.

⁷⁷¹ Public Law 104-121, 110 Stat. 857 (1996) (codified in various sections of 5 U.S.C., 15 U.S.C. and as a note to 5 U.S.C. 601).

⁷⁶⁴ See 5 U.S.C. 601 *et seq.*

⁷⁶⁵ 5 U.S.C. 603(a).

⁷⁶⁶ Section 601(b) of the RFA permits agencies to formulate their own definitions of "small entities." See 5 U.S.C. 601(b). The Commission has adopted definitions for the term "small entity" for the purposes of rulemaking in accordance with the RFA. These definitions, as relevant to this proposed rulemaking, are set forth in Rule 0-10, 17 CFR 240.0-10.

⁷⁶⁷ See 5 U.S.C. 605(b).

List of Subjects in 17 CFR Part 240

Reporting and recordkeeping requirements, Securities.

Text of Amendment

In accordance with the foregoing, Title 17, Chapter II of the Code of Federal Regulations is proposed to be amended as follows:

PART 240—GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE

■ 1. The general authority citation for Part 240 continues to read, and the sectional authority for § 240.17Ad–22 is revised to read, as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z–2, 77z–3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78d, 78e, 78f, 78g, 78i, 78j, 78j–1, 78k, 78k–1, 78l, 78m, 78n, 78n–1, 78o, 78o–4, 78p, 78q, 78q–1, 78s, 78u–5, 78w, 78x, 78ll, 78mm, 80a–20, 80a–23, 80a–29, 80a–37, 80b–3, 80b–4, 80b–11, and 7201 et. seq.; 18 U.S.C. 1350; and 12 U.S.C. 5221(e)(3), unless otherwise noted.

* * * * *

Section 240.17Ad–22 is also issued under 12 U.S.C. 5461 et seq.

* * * * *

■ 2. Section 240.17Ab2–2 is added to read as follows:

§ 240.17Ab2–2 Determinations affecting covered clearing agencies.

(a) The Commission may, if it deems appropriate, upon application by any clearing agency or member of a clearing agency, or on its own initiative, determine whether a registered clearing agency should be considered a covered clearing agency. In determining whether a clearing agency should be considered a covered clearing agency, the Commission may consider:

(1) Characteristics such as the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults; or

(2) Such other characteristics as it deems appropriate in the circumstances.

(b) The Commission may, if it deems appropriate, upon application by any clearing agency or member of a clearing agency, or on its own initiative, determine whether a covered clearing agency is systemically important in multiple jurisdictions. In determining whether a covered clearing agency is systemically important in multiple jurisdictions, the Commission may consider:

(1) Whether the covered clearing agency is a designated clearing agency;

(2) Whether the clearing agency has been determined to be systemically

important by one or more jurisdictions other than the United States through a process that includes consideration of whether the foreseeable effects of a failure or disruption of the designated clearing agency could threaten the stability of each relevant jurisdiction's financial system; or

(3) Such other factors as it may deem appropriate in the circumstances.

(c) The Commission may, if it deems appropriate, determine whether any of the activities of a clearing agency providing central counterparty services, in addition to clearing agencies registered with the Commission for the purpose of clearing security-based swaps, have a more complex risk profile. In determining whether a clearing agency's activity has a more complex risk profile, the Commission may consider:

(1) Characteristics such as the clearing of financial instruments that are characterized by discrete jump-to-default price changes or that are highly correlated with potential participant defaults; or

(2) Such other characteristics as it deems appropriate in the circumstances, as factors supporting a finding of a more complex risk profile.

(d) The Commission shall publish notice of its intention to consider making a determination under paragraph (a), (b), or (c) of this section, together with a brief statement of the grounds under consideration therefor, and provide at least a 30-day public comment period prior to any such determination, giving all interested persons an opportunity to submit written data, views, and arguments concerning such proposed determination. The Commission may provide the clearing agency subject to the proposed determination opportunity for hearing regarding the proposed determination.

(e) Notice of determinations under paragraph (a), (b), or (c) of this section shall be given by prompt publication thereof, together with a statement of written reasons therefor.

(f) For purposes of this rule, the terms *central counterparty*, *covered clearing agency*, *designated clearing agency*, and *systemically important in multiple jurisdictions* shall have the meanings set forth in § 240.17Ad–22(a).

■ 3. Amend § 240.17Ad–22 by:

■ a. Revising paragraph (a) and the introductory text of paragraph (d); and

■ b. Adding paragraphs (e) and (f).

The revisions and additions read as follows:

§ 240.17Ad–22 Standards for clearing agencies.

(a) *Definitions.* For purposes of this section:

(1) *Backtesting* means an ex-post comparison of actual outcomes with expected outcomes derived from the use of margin models.

(2) *Central counterparty* means a clearing agency that interposes itself between the counterparties to securities transactions, acting functionally as the buyer to every seller and the seller to every buyer.

(3) *Central securities depository services* means services of a clearing agency that is a securities depository as described in Section 3(a)(23)(A) of the Exchange Act (15 U.S.C. 78c(a)(23)(A)).

(4) *Clearing agency involved in activities with a more complex risk profile* means a clearing agency registered with the Commission under Section 17A of the Exchange Act (15 U.S.C. 78q–1) and that:

(i) Provides central counterparty services for security-based swaps;

(ii) Has been determined by the Commission to be involved in activities with a more complex risk profile at the time of its initial registration; or

(iii) Is subsequently determined by the Commission to be involved in activities with a more complex risk profile pursuant to § 240.17Ab2–2(c).

(5) *Conforming model validation* means an evaluation of the performance of each material risk management model used by a covered clearing agency (and the related parameters and assumptions associated with such models), including initial margin models, liquidity risk models, and models used to generate clearing or guaranty fund requirements, performed by a qualified person who is free from influence from the persons responsible for the development or operation of the models or policies being validated.

(6) *Conforming sensitivity analysis* means a sensitivity analysis that:

(i) Considers the impact on the model of both moderate and extreme changes in a wide range of inputs, parameters, and assumptions, including correlations of price movements or returns if relevant, which reflect a variety of historical and hypothetical market conditions. Sensitivity analysis must use actual and hypothetical portfolios that reflect the characteristics of proprietary positions and, where applicable, customer positions;

(ii) When performed by or on behalf of a covered clearing agency involved in activities with a more complex risk profile, considers the most volatile relevant periods, where practical, that

have been experienced by the markets served by the clearing agency; and

(iii) Tests the sensitivity of the model to stressed market conditions, including the market conditions that may ensue after the default of a member and other extreme but plausible conditions as defined in a covered clearing agency's risk policies.

(7) *Covered clearing agency* means a designated clearing agency, a clearing agency involved in activities with a more complex risk profile for which the Commodity Futures Trading Commission is not the Supervisory Agency as defined in Section 803(8) of the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5461 *et seq.*), or any clearing agency determined to be a covered clearing agency by the Commission pursuant to § 240.17Ab2-2.

(8) *Designated clearing agency* means a clearing agency registered with the Commission under Section 17A of the Exchange Act (15 U.S.C. 78q-1) that is designated systemically important by the Financial Stability Oversight Council pursuant to the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5461 *et seq.*) and for which the Commission is the supervisory agency as defined in Section 803(8) of the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5461 *et seq.*).

(9) *Financial market utility* has the same meaning as defined in Section 803(6) of the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5462(6)).

(10) *Link* means, for purposes of paragraph (e)(20) of this section, a set of contractual and operational arrangements between two or more clearing agencies, financial market utilities, or trading venues that connect them directly or indirectly for the purposes of participating in settlement, cross margining, expanding their services to additional instruments or participants, or for any other purposes material to their business.

(11) *Net capital* as used in paragraph (b)(7) of this section means net capital as defined in § 240.15c3-1 for broker-dealers or any similar risk adjusted capital calculation for all other prospective clearing members.

(12) *Normal market conditions* as used in paragraphs (b)(1) and (2) of this section means conditions in which the expected movement of the price of cleared securities would produce changes in a clearing agency's exposures to its participants that would be expected to breach margin requirements or other risk control mechanisms only one percent of the time.

(13) *Participant family* means that if a participant directly, or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with, another participant then the affiliated participants shall be collectively deemed to be a single participant family for purposes of paragraphs (b)(3), (d)(14), (e)(4), and (e)(7) of this section.

(14) *Potential future exposure* means the maximum exposure estimated to occur at a future point in time with an established single-tailed confidence level of at least 99% with respect to the estimated distribution of future exposure.

(15) *Qualifying liquid resources* means, for any covered clearing agency, the following, in each relevant currency:

(i) Cash held either at the central bank of issue or at creditworthy commercial banks;

(ii) Assets that are readily available and convertible into cash through prearranged funding arrangements without material adverse change provisions, such as:

(A) Committed arrangements, including:

(1) Lines of credit,

(2) Foreign exchange swaps, and

(3) Repurchase agreements; or

(B) Other prearranged funding arrangements determined to be highly reliable even in extreme but plausible market conditions by the board of directors of the covered clearing agency following a review conducted for this purpose not less than annually; and

(iii) Other assets that are readily available and eligible for pledging to (or conducting other appropriate forms of transactions with) a relevant central bank, if the covered clearing agency has access to routine credit at such central bank that permits said pledges or other transactions by the covered clearing agency.

(16) *Security-based swap* means a security-based swap as defined in Section 3(a)(68) of the Exchange Act (15 U.S.C. 78c(a)(68)).

(17) *Sensitivity analysis* means an analysis that involves analyzing the sensitivity of a model to its assumptions, parameters, and inputs.

(18) *Stress testing* means the estimation of credit or liquidity exposures that would result from the realization of extreme but plausible price changes or changes in other valuation inputs and assumptions.

(19) *Systemically important in multiple jurisdictions* means, with respect to a covered clearing agency, a covered clearing agency that has been determined by the Commission to be

systemically important in more than one jurisdiction pursuant to § 240.17Ab2-2.

(20) *Transparent* means, for the purposes of paragraphs (e)(1), (2), and (10) of this section, to the extent consistent with other statutory and Commission requirements on confidentiality and disclosure, that relevant documentation is disclosed, as appropriate, to the Commission and to other relevant authorities, to clearing members and to customers of clearing members, to the owners of the covered clearing agency, and to the public.

* * * * *

(d) Each registered clearing agency that is not a covered clearing agency shall establish, implement, maintain and enforce written policies and procedures reasonably designed to, as applicable:

* * * * *

(e) Each covered clearing agency shall establish, implement, maintain and enforce written policies and procedures reasonably designed to, as applicable:

(1) Provide for a well-founded, clear, transparent, and enforceable legal basis for each aspect of its activities in all relevant jurisdictions.

(2) Provide for governance arrangements that:

(i) Are clear and transparent;

(ii) Clearly prioritize the safety and efficiency of the covered clearing agency;

(iii) Support the public interest requirements in Section 17A of the Exchange Act (15 U.S.C. 78q-1) applicable to clearing agencies, and the objectives of owners and participants; and

(iv) Establish that the board of directors and senior management have appropriate experience and skills to discharge their duties and responsibilities.

(3) Maintain a sound risk management framework for comprehensively managing legal, credit, liquidity, operational, general business, investment, custody, and other risks that arise in or are borne by the covered clearing agency, which:

(i) Includes risk management policies, procedures, and systems designed to identify, measure, monitor, and manage the range of risks that arise in or are borne by the covered clearing agency, that are subject to review on a specified periodic basis and approved by the board of directors annually;

(ii) Includes plans for the recovery and orderly wind-down of the covered clearing agency necessitated by credit losses, liquidity shortfalls, losses from general business risk, or any other losses;

(iii) Provides risk management and internal audit personnel with sufficient authority, resources, independence from management, and access to the board of directors;

(iv) Provides risk management and internal audit personnel with a direct reporting line to, and oversight by, a risk management committee and an audit committee of the board of directors, respectively; and

(v) Provides for an independent audit committee.

(4) Effectively identify, measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes, including by:

(i) Maintaining sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence;

(ii) To the extent not already maintained pursuant to paragraph (e)(4)(i) of this section, for a covered clearing agency providing central counterparty services that is either systemically important in multiple jurisdictions or a clearing agency involved in activities with a more complex risk profile, maintaining additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the two participant families that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions;

(iii) To the extent not already maintained pursuant to paragraph (e)(4)(i) of this section, for a covered clearing agency not subject to paragraph (e)(4)(ii) of this section, maintaining additional financial resources at the minimum to enable it to cover a wide range of foreseeable stress scenarios that include, but are not limited to, the default of the participant family that would potentially cause the largest aggregate credit exposure for the covered clearing agency in extreme but plausible market conditions;

(iv) Including prefunded financial resources, excluding assessments for additional guaranty fund contributions or other resources that are not prefunded, when calculating the financial resources available to meet the standards under paragraphs (e)(4)(i) through (iii) of this section, as applicable;

(v) Maintaining the financial resources required under paragraphs (e)(4)(i) through (iii) of this section, as applicable, in combined or separately maintained clearing or guaranty funds;

(vi) Testing the sufficiency of its total financial resources available to meet the minimum financial resource requirements under paragraphs (e)(4)(i) through (iii) of this section, as applicable, by:

(A) Conducting a stress test of its total financial resources once each day using standard predetermined parameters and assumptions;

(B) Conducting a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions, and considering modifications to ensure they are appropriate for determining the covered clearing agency's required level of default protection in light of current and evolving market conditions;

(C) Conducting a comprehensive analysis of stress testing scenarios, models, and underlying parameters and assumptions more frequently than monthly when the products cleared or markets served display high volatility or become less liquid, and when the size or concentration of positions held by the covered clearing agency's participants increases significantly; and

(D) Reporting the results of its analyses under paragraphs (e)(4)(iv)(B) and (C) of this section to appropriate decision makers at the covered clearing agency, including but not limited to, its risk management committee or board of directors, and using these results to evaluate the adequacy of and adjust its margin methodology, model parameters, models used to generate clearing or guaranty fund requirements, and any other relevant aspects of its credit risk management framework, in supporting compliance with the minimum financial resources requirements set forth in paragraphs (e)(4)(i) through (iii) of this section; and

(vii) Performing a conforming model validation for its credit risk models to be performed not less than annually or more frequently as may be contemplated by the covered clearing agency's risk management framework established pursuant to paragraph (e)(3) of this section.

(5) Limit the assets it accepts as collateral to those with low credit, liquidity, and market risks, and set and enforce appropriately conservative haircuts and concentration limits if the covered clearing agency requires collateral to manage its or its participants' credit exposure; and require a review of the sufficiency of its collateral haircuts and concentration limits to be performed not less than annually.

(6) Cover, if the covered clearing agency provides central counterparty

services, its credit exposures to its participants by establishing a risk-based margin system that, at a minimum:

(i) Considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market;

(ii) Marks participant positions to market and collects margin, including variation margin or equivalent charges if relevant, at least daily and includes the authority and operational capacity to make intraday margin calls in defined circumstances;

(iii) Calculates margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default;

(iv) Uses reliable sources of timely price data and procedures and sound valuation models for addressing circumstances in which pricing data are not readily available or reliable;

(v) Uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products;

(vi) Is monitored by management on an ongoing basis and regularly reviewed, tested, and verified by:

(A) Conducting backtests of its margin resources at least once each day using standard predetermined parameters and assumptions;

(B) Conducting a conforming sensitivity analysis of its margin resources and its parameters and assumptions for backtesting on at least a monthly basis, and considering modifications to ensure the backtesting practices are appropriate for determining the adequacy of the covered clearing agency's margin resources;

(C) Conducting a conforming sensitivity analysis of its margin resources and its parameters and assumptions for backtesting more frequently than monthly during periods of time when the products cleared or markets served display high volatility or become less liquid, and when the size or concentration of positions held by the covered clearing agency's participants increases or decreases significantly; and

(D) Reporting the results of its analyses under paragraphs (e)(6)(vi)(B) and (C) of this section to appropriate decision makers at the covered clearing agency, including but not limited to, its risk management committee or board of directors, and using these results to evaluate the adequacy of and adjust its margin methodology, model parameters, and any other relevant aspects of its credit risk management framework; and

(vii) Requires a conforming model validation for the covered clearing agency's margin system and related models to be performed not less than annually, or more frequently as may be contemplated by the covered clearing agency's risk management framework established pursuant to paragraph (e)(3) of this section.

(7) Effectively measure, monitor, and manage the liquidity risk that arises in or is borne by the covered clearing agency, including measuring, monitoring, and managing its settlement and funding flows on an ongoing and timely basis, and its use of intraday liquidity by, at a minimum, doing the following:

(i) Maintaining sufficient liquid resources at the minimum in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the participant family that would generate the largest aggregate payment obligation for the covered clearing agency in extreme but plausible market conditions;

(ii) Holding qualifying liquid resources sufficient to meet the minimum liquidity resource requirement under paragraph (e)(7)(i) of this section in each relevant currency for which the covered clearing agency has payment obligations owed to clearing members;

(iii) Using the access to accounts and services at a Federal Reserve Bank, pursuant to Section 806(a) of the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5465(a)), or other relevant central bank, when available and where determined to be practical by the board of directors of the covered clearing agency, to enhance its management of liquidity risk;

(iv) Undertaking due diligence to confirm that it has a reasonable basis to believe each of its liquidity providers, whether or not such liquidity provider is a clearing member, has:

(A) Sufficient information to understand and manage the liquidity provider's liquidity risks; and

(B) The capacity to perform as required under its commitments to provide liquidity to the covered clearing agency;

(v) Maintaining and testing with each liquidity provider, to the extent practicable, the covered clearing agency's procedures and operational capacity for accessing each type of relevant liquidity resource under

paragraph (e)(7)(i) of this section at least annually;

(vi) Determining the amount and regularly testing the sufficiency of the liquid resources held for purposes of meeting the minimum liquid resource requirement under paragraph (e)(7)(i) of this section by, at a minimum:

(A) Conducting a stress test of its liquidity resources at least once each day using standard and predetermined parameters and assumptions;

(B) Conducting a comprehensive analysis on at least a monthly basis of the existing stress testing scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources, and considering modifications to ensure they are appropriate for determining the clearing agency's identified liquidity needs and resources in light of current and evolving market conditions;

(C) Conducting a comprehensive analysis of the scenarios, models, and underlying parameters and assumptions used in evaluating liquidity needs and resources more frequently than monthly when the products cleared or markets served display high volatility, become less liquid, when the size or concentration of positions held by the clearing agency's participants increases significantly and in other appropriate circumstances described in such policies and procedures; and

(D) Reporting the results of its analyses under paragraphs (e)(6)(vii)(B) and (C) of this section to appropriate decision makers at the covered clearing agency, including but not limited to, its risk management committee or board of directors, and using these results to evaluate the adequacy of and adjust its liquidity risk management methodology, model parameters, and any other relevant aspects of its credit risk management framework;

(vii) Performing a conforming model validation of its liquidity risk models not less than annually or more frequently as may be contemplated by the covered clearing agency's risk management framework established pursuant to paragraph (e)(3) of this section;

(viii) Addressing foreseeable liquidity shortfalls that would not be covered by the covered clearing agency's liquid resources and seek to avoid unwinding, revoking, or delaying the same-day settlement of payment obligations;

(ix) Describing the covered clearing agency's process to replenish any liquid resources that the clearing agency may employ during a stress event; and

(x) Undertaking an analysis at least once a year that evaluates the feasibility of maintaining sufficient liquid

resources at a minimum in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default of the two participant families that would potentially cause the largest aggregate payment obligation for the covered clearing agency in extreme but plausible market conditions if the covered clearing agency provides central counterparty services and is either systemically important in multiple jurisdictions or a clearing agency involved in activities with a more complex risk profile.

(8) Define the point at which settlement is final no later than the end of the day on which the payment or obligation is due and, where necessary or appropriate, intraday or in real time.

(9) Conduct its money settlements in central bank money, where available and determined to be practical by the board of directors of the covered clearing agency, and minimize and manage credit and liquidity risk arising from conducting its money settlements in commercial bank money if central bank money is not used by the covered clearing agency.

(10) Establish and maintain transparent written standards that state its obligations with respect to the delivery of physical instruments, and establish and maintain operational practices that identify, monitor, and manage the risks associated with such physical deliveries.

(11) When the covered clearing agency provides central securities depository services:

(i) Maintain securities in an immobilized or dematerialized form for their transfer by book entry, ensure the integrity of securities issues, and minimize and manage the risks associated with the safekeeping and transfer of securities;

(ii) Implement internal auditing and other controls to safeguard the rights of securities issuers and holders and prevent the unauthorized creation or deletion of securities, and conduct periodic and at least daily reconciliation of securities issues it maintains; and

(iii) Protect assets against custody risk through appropriate rules and procedures consistent with relevant laws, rules, and regulations in jurisdictions where it operates.

(12) Eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other, regardless of whether the covered clearing agency settles on a

gross or net basis and when finality occurs if the covered clearing agency settles transactions that involve the settlement of two linked obligations.

(13) Ensure the covered clearing agency has the authority and operational capacity to take timely action to contain losses and liquidity demands and continue to meet its obligations by, at a minimum, doing the following:

(i) Addressing allocation of credit losses the covered clearing agency may face if its collateral and other resources are insufficient to fully cover its credit exposures, including the repayment of any funds the covered clearing agency may borrow from liquidity providers;

(ii) Describing the covered clearing agency's process to replenish any financial resources it may use following a default or other event in which use of such resources is contemplated; and

(iii) Requiring the covered clearing agency's participants and, when practicable, other stakeholders to participate in the testing and review of its default procedures, including any close-out procedures, at least annually and following material changes thereto.

(14) Enable, when the covered clearing agency provides central counterparty services for security-based swaps or engages in activities that the Commission has determined to have a more complex risk profile, the segregation and portability of positions of a participant's customers and the collateral provided to the covered clearing agency with respect to those positions and effectively protect such positions and related collateral from the default or insolvency of that participant.

(15) Identify, monitor, and manage the covered clearing agency's general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that the covered clearing agency can continue operations and services as a going concern if those losses materialize, including by:

(i) Determining the amount of liquid net assets funded by equity based upon its general business risk profile and the length of time required to achieve a recovery or orderly wind-down, as appropriate, of its critical operations and services if such action is taken;

(ii) Holding liquid net assets funded by equity equal to the greater of either (x) six months of the covered clearing agency's current operating expenses, or (y) the amount determined by the board of directors to be sufficient to ensure a recovery or orderly wind-down of critical operations and services of the covered clearing agency, as contemplated by the plans established

under paragraph (e)(3)(ii) of this section, and which:

(A) Shall be in addition to resources held to cover participant defaults or other risks covered under the credit risk standard in paragraph (b)(3) or paragraphs (e)(4)(i) through (iii) of this section, as applicable, and the liquidity risk standard in paragraphs (e)(7)(i) and (ii) of this section; and

(B) Shall be of high quality and sufficiently liquid to allow the covered clearing agency to meet its current and projected operating expenses under a range of scenarios, including in adverse market conditions; and

(iii) Maintaining a viable plan, approved by the board of directors and updated at least annually, for raising additional equity should its equity fall close to or below the amount required under paragraph (e)(15)(ii) of this section.

(16) Safeguard the covered clearing agency's own and its participants' assets, minimize the risk of loss and delay in access to these assets, and invest such assets in instruments with minimal credit, market, and liquidity risks.

(17) Manage the covered clearing agency's operational risks by:

(i) Identifying the plausible sources of operational risk, both internal and external, and mitigating their impact through the use of appropriate systems, policies, procedures, and controls;

(ii) Establishing and maintaining policies and procedures reasonably designed to ensure that systems have a high degree of security, resiliency, operational reliability, and adequate, scalable capacity; and

(iii) Establishing and maintaining a business continuity plan that addresses events posing a significant risk of disrupting operations.

(18) Establish objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access by direct and, where relevant, indirect participants and other financial market utilities, require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the clearing agency, and monitor compliance with such participation requirements on an ongoing basis.

(19) Identify, monitor, and manage the material risks to the covered clearing agency arising from arrangements in which firms that are indirect participants in the covered clearing agency rely on the services provided by direct participants to access the covered clearing agency's payment, clearing, or settlement facilities.

(20) Identify, monitor, and manage risks related to any link the covered clearing agency establishes with one or more other clearing agencies, financial market utilities, or trading markets.

(21) Be efficient and effective in meeting the requirements of its participants and the markets it serves, and have the covered clearing agency's management regularly review the efficiency and effectiveness of its:

(i) Clearing and settlement arrangements;

(ii) Operating structure, including risk management policies, procedures, and systems;

(iii) Scope of products cleared, settled, or recorded; and

(iv) Use of technology and communication procedures.

(22) Use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, and settlement.

(23) Maintain clear and comprehensive rules and procedures that provide for the following:

(i) Publicly disclosing all relevant rules and material procedures, including key aspects of its default rules and procedures;

(ii) Providing sufficient information to enable participants to identify and evaluate the risks, fees, and other material costs they incur by participating in the covered clearing agency;

(iii) Publicly disclosing relevant basic data on transaction volume and values;

(iv) Providing a comprehensive public disclosure of its material rules, policies, and procedures regarding governance arrangements and legal, financial, and operational risk management, accurate in all material respects at the time of publication, that includes:

(A) *Executive summary.* An executive summary of the key points from paragraphs (e)(23)(iv)(B), (C), and (D) of this section;

(B) *Summary of material changes since the last update of the disclosure.*

A summary of the material changes since the last update of paragraph (e)(23)(iv)(C) or (D) of this section;

(C) *General background on the covered clearing agency.* A description of:

(1) The covered clearing agency's function and the markets it serves,

(2) Basic data and performance statistics on the covered clearing agency's services and operations, such as basic volume and value statistics by product type, average aggregate intraday exposures to its participants, and statistics on the covered clearing agency's operational reliability, and

(3) The covered clearing agency's general organization, legal and regulatory framework, and system design and operations; and

(D) *Standard-by-standard summary narrative.* A comprehensive narrative disclosure for each applicable standard set forth in paragraphs (e)(1) through (22) of this section with sufficient detail and context to enable a reader to understand the covered clearing agency's approach to controlling the risks and addressing the requirements in each standard; and

(v) Updating the public disclosure under paragraph (e)(23)(iv) of this

section every two years, or more frequently following changes to its system or the environment in which it operates to the extent necessary to ensure statements previously provided under paragraph (e)(23)(iv) of this section remain accurate in all material respects.

(f) For purposes of enforcing the Payment, Clearing, and Settlement Supervision Act of 2010 (12 U.S.C. 5461 *et seq.*), a designated clearing agency for which the Commission acts as supervisory agency shall be subject to, and the Commission shall have the authority under, the provisions of

paragraphs (b) through (n) of Section 8 of the Federal Deposit Insurance Act (12 U.S.C. 1818) in the same manner and to the same extent as if such designated clearing agency were an insured depository institution and the Commission were the appropriate Federal banking agency for such insured depository institution.

By the Commission.

Dated: March 12, 2014.

Kevin M. O'Neill,

Deputy Secretary.

[FR Doc. 2014-05806 Filed 3-25-14; 8:45 am]

BILLING CODE 8011-01-P