United States: 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

This Detailed Assessment of Observance of the Fixed Income Clearing Corporation – Government Securities Division's Observance of the CPSS-IOSCO Recommendations for Central Counterparties for the United States was prepared by a staff team of the International Monetary Fund. It is based on the information available at the time it was completed in May 7, 2010. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the United States or the Executive Board of the IMF.

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FINANCIAL SECTOR ASSESSMENT PROGRAM

UNITED STATES OF AMERICA

THE FIXED INCOME CLEARING CORPORATION – GOVERNMENT SECURITIES DIVISION'S OBSERVANCE OF THE CPSS-IOSCO RECOMMENDATIONS FOR CENTRAL COUNTERPARTIES

DETAILED ASSESSMENT OF OBSERVANCE

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GLOSSARY

BCP Business Continuity Plan

BITS Banking, Infrastructure and Technology Services

CCP Central Counterparty

CFTC Commodity Futures Trading Commission

CME Chicago Mercantile Exchange

CPSS Committee on Payment and Settlement Systems

DTC Depository Trust Company

DTCC Depository Trust and Clearing Corporation

DVP Delivery-versus-Payment FDIA Federal Deposit Insurance Act

FDICIA Federal Deposit Insurance Corporation Improvement Act

FDIC Federal Deposit Insurance Corporation

FICC-GSD Fixed Income Clearing Corporation – Government Securities Division FICC-MSBD Fixed Income Clearing Corporation – Mortgage Backed Securities Division

FR Federal Reserve FRA Federal Reserve Act

IMF International Monetary Fund

IOSCO International Organization of Securities Commission

ISO International Organization for Standardization

JPMC J.P. Morgan Chase

MOU Memorandum of Understanding

NSCC National securities Clearing Corporation

NSS National Settlement Service

RCCP Recommendation for Central Counterparties

RSSS Recommendation for securities Settlement Systems

SEC Securities and Exchange Commission SIPA Securities Investor Protection Act

SIFMA Securities Industry and Financial Markets Association

SROs Self Regulated Organizations

TRADES Treasury/Reserve Automated Debt Entry System

UCC Uniform Commercial Code

Table 1. Detailed Assessment of Observance of the Fixed Income Clearing Corporation – Government Securities Division (FICC-GSD) of the CPSS-IOSCO Recommendations for Central Counterparties

FICC is composed of two divisions: the Government Securities Division (GSD) and the Mortgage Backed Securities Division (MBSD). This assessment only covers FICC-GSD, i.e. the CCP providing services for transactions in U.S. Government Treasury and Agency securities. The MBSD, which is not yet providing CCP services, is not covered by this FSAP mission. In this regard, it is noted that a rule filing has been submitted to the SEC for setting such a CCP.

Recommendation 1	A CCP should have a well founded, transparent and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.
Description	Accessibility of the regulatory framework (Q1) Laws, regulations, rules, procedures and contractual provisions governing the operations and activities of the FICC-GSD are public and readily accessible to system participants. All changes to FICC-GSD's Rules are filed with and reviewed by the SEC, and proposed rule changes are published for public comment. FICC-GSD's rule filings and SEC approvals are posted on the DTCC website as well as the SEC's website, www.sec.gov .
	All FICC-GSD participants are required to execute membership agreements under which they agree to be bound by FICC-GSD's Rules.
	Legal basis (Q2) Securities clearing and settlement activities are governed and regulated by specific laws and regulations, and the provisions in other financial legislation and regulations: • Securities Exchange Act of 1934
	 Securities and Exchange Commission rules and regulations Federal Reserve Act
	 Federal Reserve Banks Operating Circulars (in particular OC12, OC6) Self Regulatory Organizations Rules and Procedures New York State Law FICC-GSD's rules and procedures
	 Article 8 of the Uniform Commercial Code Subpart B of regulation J incorporating the provisions of article 4A of the Uniform Commercial Code
	 U.S. Federal Deposit Insurance Corporation Improvement act of 1991 New York State Banking Laws
	Liquidation provisions of applicable federal and state banking laws
	The legal framework demonstrate a high degree of assurance that there is a clear and effective legal basis for:
	(a) The CCP acting as counterparty
	The legal framework includes statutory provisions and clearing agency rules. The New York law of contracts and provisions of the Uniform Commercial Code (the "UCC") (see e.g., NYUCC §8-111) support the enforceability of FICC-GSD acting as a central CCP. In particular, Section 8-111 of the New York UCC which provides: "A rule adopted by a clearing corporation governing the rights and obligations among the clearing corporation
	and its participants in the clearing corporation is effective even if the rule conflicts with this article [8] and affects another party who does not consent to the rule." In addition, each membership applicant is required to provide an opinion of counsel that provides that the membership agreement and the Rules (including those relating to FICC-GSD's role as a CCP) are enforceable against it.

(b) The timing of assumption of liability as CCP

The New York law of contracts and provisions of the UCC (*See*, e.g., New York UCC §8-111) referred to in the paragraph above supports the enforceability of the timing of assumption of liability as CCP by FICC-GSD.

(c) Netting arrangements

U.S. law supports netting arrangements relating to securities transactions. In particular, the U.S. Federal Deposit Insurance Corporation Improvement Act of 1991, as amended ("FDICIA") supports "netting contracts" providing for the netting of payment obligations and payment entitlements between and among members of clearing organizations. Under FDICIA, netting under a netting contract is not prevented or subject to being unwound by the receiver or trustee in a subsequent insolvency proceeding. The netting provisions of FDICIA were designed to reduce systemic risk to the financial markets. In addition, New York law recognizes the validity of contractual netting arrangements generally (including transaction novation, payment and closeout netting).

In addition, recent amendments to both FDICIA and the U.S. Bankruptcy Code contained in the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 include provisions that validate master netting agreements in respect of securities, commodities, forward, swap and repurchase transactions, and provide that the closeout and netting of transactions arising under such agreements may not be stayed or avoided in any bankruptcy proceeding brought under the Code, the Federal Deposit Insurance Act (FDIA), or the Securities Investor Protection Act (SIPA) (subject in the case of SIPA, to certain exceptions not relevant for clearing organizations).

(d) The protection of the CCP's interest in collateral (including margin)

Legal comfort for the validity of FICC-GSD's membership agreements and its Rules, including the validity of FICC-GSD's lien and collateral protections, is found principally in the UCC (Articles 8 and 9) and general New York contract law. Although relevant insolvency laws can limit a secured party's rights to access and liquidate its collateral, the FDICIA provision referred to above, the Code, FDIA, and SIPA contain specific provisions to protect clearing agency closeouts (including access to and retention of collateral).

(e) Default procedures

FICC-GSD's Rules provide that if a Member fails to meet its settlement obligations to FICC-GSD, and FICC-GSD suspend/terminate the Member, that Member's positions would be closed out. Clearing agency close-out provisions are specifically permitted under both FDICIA and the Bankruptcy Code.

(f) Finality of transfers of funds and financial instruments

Finality between FICC-GSD and its clearing banks is governed by the applicable account agreements (once a settlement instruction from the FICC-GSD is acted upon by the clearing bank it may not be reversed except for the correction of an error).

Enforceability of FICC-GSD rules/procedures/contracts (Q3)

The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (amending both the FDICIA and the U.S. Bankruptcy Code) contain provisions validating the rules/procedures/contracts of FICC-GSD. Besides, the 2005 Act also provides that the close-out and netting of transactions under such agreements may not be stayed or avoided in any Amendments include provisions that validate the rules, procedures and contracts of FICC-GSD, bankruptcy proceeding brought under the Code, FDIA, or SIPA (subject in the case of SIPA, to certain exceptions not relevant for clearing organizations)

	Cross-border activities (Q4) Around 10 percent of the FICC-GSD members are established or incorporated outside the US. Historically, FICC-GSD has required legal opinions of outside legal counsels. The 2005 Act, referred to above, states that should a foreign receiver on behalf of a defaulting foreign member seek recognition in the U.S. bankruptcy courts, the same protections available to FICC-GSD under the Code with respect to a domestic Member should also be available to it in any domestic proceeding brought on behalf of a foreign Member. The FICC-GSD has currently no cross-border arrangement with other CCPs.
Assessment	Observed.
Comments	Observed.
Recommendation 2.	A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met on an ongoing basis. A CCP's participation requirements should be objective, publicly disclosed, and permit fair and open access.
Description	Sufficient financial resources and robust operational reliability (Q1) FICC-GSD establishes requirements for participants' financial resources and creditworthiness (set in FICC-GSD's Rule 2A on initial membership requirements and Rule 3 on ongoing membership requirements). Financial requirements depend on the legal status of the participants (e.g., broker/dealer,
	bank/trust company, etc.), the types of services that the participant will use or provide within the system. In this regard, the FICC-GSD rules distinguish between four main membership types: (i)
	comparison-only members, (ii) netting members, (iii) sponsoring members and sponsored members, and (iv) funds-only settling bank members. For each of these categories, distinctions are made per types of entity and service used. The Rule 2A set the conditions (including financial resources and operational capability) to become member.
	The FICC-GSD's rules (<i>see</i> Rule 4 (Clearing Fund)) provide that all guaranteed service Members are required to make a deposit to the Clearing Fund, with the amount of each Member's required deposit being fixed by the FICC-GSD in accordance with the Rules.
	FICC-GSD assesses Members' operational capability to ensure that they are able to satisfactorily communicate with the FICC-GSD (i.e., send-in trade input and receive output from the FICC-GSD). Members provide FICC-GSD with certain financial and operational information reviewed by DTCC risk management to ensure that the applicant: 1) has sufficient financial ability to make anticipated contributions to the Clearing Fund and to meet obligations to FICC-GSD, and 2) has an established business record of a minimum of six months or personnel with sufficient operational background and experience to ensure the ability of the firm to conduct such a business. In addition, FICC-GSD confirms that the applicant will be able to fulfill anticipated commitments to and meet the operational requirements of FICC-GSD with necessary promptness and accuracy prior to activating membership, FICC-GSD applicants are required to conduct operational testing with FICC-GSD (e.g., connectivity testing).
	Monitor compliance with participation requirements (Q2) FICC-GSD monitors that participation requirements are met on an ongoing basis (Rule 3 on ongoing membership requirement). To this end, FICC-GSD members must submit annual audited financial statements and well as interim financial statements for certain members. Reporting requirements vary depending on the type of entity and services used. In addition, the Risk Management function receives monthly or quarterly regulatory reports, depending on the reporting frequency of the Members. The rules foresee that

FICC-GSD may impose a fine on Members that fail to timely provide such information.

As part of the ongoing monitoring of Member firms an internal credit risk rating matrix is used to risk rate bank and broker/dealer Members. This matrix is quantitatively driven and is produced systemically from data contained in the Members' regulatory reports. The SEC has evaluated this matrix when FICC added it to its risk management, and the matrix is subject to periodic regulatory review. The key financial elements focus on a Member's capital, leverage, liquidity and profitability. Once this rating is generated it is then reviewed by an analyst for possible downgrade due to qualitative factors such as regulatory history or type of audit opinion issued and then a final rating is assigned. The resulting rating determines the level of financial review that will be performed on each Member and may impact the Member's Clearing Fund requirement. Additionally, the Risk Management department monitors the markets and news intraday, so that action can be taken if warranted.

Suspension and termination of participants' membership

Termination of participants' membership can result from a participant decision or a FICC-GSD's decision. FICC-GSD's rules contain provisions in this regard. In case a member decides to terminate participation, Rule 3 section 13 on voluntary termination sets that a comparison-only member or a netting member can terminate its membership by providing a written notice to FICC-GSD. The Rule further specifies that such voluntary termination should not affect the member's obligations to FICC-GSD in case of transactions submitted before the termination date. In the case of a sponsoring member and, voluntary termination is also done by written request. (rule 3A)

FICC-GSD can determine termination of a participant's membership in the following cases:

- if a participant notifies FICC-GSD that, due to external circumstances, it intends to wind-down its activities. In this context, rule 21A (on wind down of a netting member) allows FICC-GSD to take actions with regard to this participant in view of mitigating the risk, including (but not limited to) permitting the wind-down Member to submit only transactions that serve to support the wind-down, restricting or modifying the wind-down member's use of any or all of the FICC-GSD's services, and requiring the wind-down Member to increase Clearing Fund deposits;
- if a participant is no longer in compliance with access requirements. In this case, FICC-GSD's rules allow for restricting a member's access to services, by limiting or excluding the Member's participation on one or more transactions or services or by terminate its membership (rule 21 on restrictions on Access to Services).
- if a member becomes insolvent, following rule 22 on insolvency of a member.

In these three cases, FICC-GSD will notify the SEC, and the affected member and other members via "important notices". These procedures are detailed in the rules, which are published on DTCC's website.

Open and fair access (Q3)

Participation requirements of FICC-GSD are objective and clearly stated in the system's rules. Access is not limited on grounds other than risk.

FICC-GSD's participation requirements address: credit risk, operational capability, compliance risk and legal risk. Only certain entities (e.g., broker/dealer, bank, etc.) specified by the rules of the system may qualify for membership. The level of reporting requirements will vary according to the type of entity and the services it uses or provides within the system.

The framework of section 17A of the Exchange Act is designed to result in fair access to the clearing agency. Section 17A(b)(3) requires that the rules of a clearing agency provide

that any (i) registered broker or dealer, (ii) other registered clearing agency, (iii) registered investment company, (iv) bank, (v) insurance company, or (vi) other person or class of persons as the Commission, by rule, may from time to time designate may become a participant in such clearing agency (although a clearing agency may deny participation to a person subject to a statutory disqualification or a person that does not meet such standards of financial responsibility, operational capability, experience, and competence as are prescribed by the rules of the clearing agency.) In addition, Section 17A(b)(3) provides that the rules of a clearing agency may not be designed to permit unfair discrimination in the admission of participants or among participants in the use of the clearing agency and may not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. Before denying a membership application, FICC-GSD must provide the applicant with a concise written statement clarifying the specific grounds under which the denial decision has been taken, and notify the applicant of its right to request a hearing to determine whether the application should be denied. Membership requirements, including the arrangements for orderly exit, are clearly stated in FICC-GSD's Rules which are available to the public at FICC's website, www.dtcc.com. Assessment Observed. Comments FICC submitted a rule filing to SEC for expanding its membership to include some buyside unregistered investment pools (UIP), such as hedge funds, as a new membership category. According to FICC, they will be able to monitor whether these entities comply with surveillance requirements on a contractual basis. Moreover, additional access requirements are intended to be imposed. In addition, certain buy-side entities, such as SEC-registered investment companies, are not permitted to mutualize losses, meaning that they may not become subject to a loss allocation that arises due to a default of a member with whom the registered investment company did not trade. In its filing to the SEC, FICC stated it will impose additional risk management measures with respect to UIP members, including calculating their Clearing Fund requirements at a higher value at risk confidence level and instituting an additional qualitative assessment requirement. Recommendation 3. A CCP should measure its credit exposures to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposure to potential losses from defaults of its participants in normal market conditions so that the operations of the CCP would not be disrupted and nondefaulting participants would not be exposed to losses that they cannot anticipate or control. Description Measurement of exposures (Q1) FICC-GSD uses a risk-based margin methodology to limit its credit exposures to members. On a daily basis FICC-GSD calculates a "Clearing Fund" requirement for each Member based upon their unsettled and pending transactions. This requirement constitutes "margin" for purposes of Recommendations 3 and 4 of this Assessment. The margin methodology is part of FICC's rules and, as such, the methodology and any material changes thereto are reviewed and approved by the SEC. The aggregate value of all such deposits is referred to collectively as the Clearing Fund, which operates as FICC-GSD's default fund in the event of a participant default. The exposures are measured daily and payments of any Clearing Fund contribution are required by 09:30 am on the settlement day. The daily calculation uses the prior day's closing market price. In addition, FICC-GSD has the ability under its Rules to call for additional Clearing Fund deposits on an intraday basis, as needed. The price of the asset is

updated on an intraday basis and additional charges may be collected to cover significant price movements from those Members with a significant exposure in the identified asset. Also, DTCC Risk Management systems include routines that permit Risk Management to monitor Members' overall trading activities throughout the trading day to determine whether exposures are building up that would require special actions to increase a Member's Clearing Fund deposit.

At multiple times during the day, these routines run and generate reports identifying Members' then-current positions. Risk Management reviews these reports on an "as needed" basis, and, if they conclude a special action is warranted, may impose an intraday Clearing Fund charge against the Member's account. On an "as needed" basis, Risk Management may also run various closeout (profit/loss) scenarios on Members' then-current positions using then-current prices.

Risk mitigation tools (Q2)

The FICC-GSD limits its exposure to potential losses from defaults by its Members as follows:

- By establishing membership standards and performing continuous monitoring of Members to those standards.
- By requiring contributions to FICC-GSD's Clearing Fund (i.e., margin). (All netting Members are required to make deposits to the Clearing Fund. The amount of their required deposits is calculated daily and collected accordingly.)
- Through the existing cross-guaranty and cross-margining arrangements with other
 clearing organizations. These arrangements are designed to provide a mechanism for
 the sharing of excess collateral of a common defaulting participant held at one clearing
 organization to cover losses incurred at another clearing organization.
- In addition, under the Rules, the FICC-GSD may seek such assurances of financial responsibility and operational capability from a Member as it deems necessary or advisable to protect itself and its Members. This may include, inter alia, restrictions on use of FICC-GSD services and increased Clearing Fund deposits.

Assessment Observed. The definition of margins and clearing funds in the public assessment should be made Comments more consistent in line with international usage/practice and the definitions provided in the glossary of the RCCP. It will be beneficial (especially for non-U.S. CCPs that intend to establish links with FICC-GSD) to clarify the terminology. FICC-GSD management stated that they would clarify this terminology in the next revision of the self-assessment. Recommendation 4. If a CCP relies on margin requirements to limit its credit exposures to participants, those requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be riskbased and reviewed regularly. Description Models and parameters to set margins (Q1) FICC-GSD calculates Clearing Fund requirements based upon most recently observed market conditions (i.e., using historical data of the most recent 250 days for bonds). The components used by FICC-GSD to calculate Clearing Fund requirements consist of: ((a) an end-of -day value at risk (VaR); (b) a margin requirement differential; and (c) a coverage component. The VaR calculations are based on three-day period with confidence level of 99 percent and this is evidenced with regular back-testing studies (which assume no positions are liquidated until the third day, and over the past two years have, on this basis, reflected

actual overall coverage exceeding 99 percent).

The margin requirement differential component addresses the risk due to future position fluctuations; the risk that the Member will not satisfy a deficiency in its Clearing Fund deposit requirement; and the risk that a Member will not satisfy its funds-only settlement obligation.

The coverage component is a back test-like component that is meant to address model deficiencies that may arise and serves to bring the member's confidence level to the desired level.

Validation of the models and parameters used to determine the margin levels FICC-GSD's Rules provide it with the flexibility to conduct a closeout over a longer liquidation period, should it deem appropriate. This model is back-tested internally on a monthly basis.

The model and FICC-GSD's general risk management procedures are periodically examined by FICC-GSD's regulators and by its internal and external auditors. The model is also periodically validated by external experts.

Intraday margin calls (Q2)

FICC-GSD has the legal authority to demand intraday margins, should it deem necessary or appropriate. Intraday margin calls can be collected (operationally), as necessary. Risk Management has discretion to make such calls, based upon, for example, market events and their effect on internally maintained predetermined thresholds.

Assets accepted as margins and related haircuts (Q3)

FICC-GSD accepts cash and certain eligible securities as collateral for the Clearing Fund. Securities currently accepted are U.S. Government Treasury securities, U.S. Agency securities guaranteed by the U.S. Government and certain U.S. Agency/Government Sponsored Enterprise pass-through securities. The lesser of 10 percent or \$5 million of a Member's Clearing Fund requirement must be made and maintained in cash.

Assets (securities), used as collateral, are re-priced every night. Haircuts for all securities pledged to the Clearing Fund are set forth in FICC-GSD's Rules. FICC-GSD applies haircuts that reflect the potential of the Clearing Fund assets' value to decline. Initial haircut rates were determined on a ten-year historical return volatility analysis using a 5 sigma confidence level, as well as the application of additional concentration factors for certain security types if the amount deposited exceeds a certain percent of total collateral. On an ongoing basis, haircut rates are reviewed quarterly. Moreover, FICC-GSD can require a letter of credit to be posted by a member as additional collateral if deemed appropriate to ensure its members and its protection.

Assessment	Observed.
Comments	
Recommendation 5.	A CCP should maintain sufficient financial resources to withstand, at a minimum, a default by the participant to which it has the largest exposure in extreme but plausible market conditions.
Description	Stress testing (Q1) FICC-GSD now performs stress testing on a monthly basis. Stress tests cover 50 stress scenarios selected from the past 10 years of historical data and special events such as the 1987 stock market crash. There are also 82 scenarios included in the stress testing that have at least some hypothetical component and are not based solely on historical performance. The results of the stress tests are brought to the attention of executive management and the DTCC board's credit and market risk management committee. The steps that the FICC-GSD would follow in the event that stress tests indicate a potential deficiency (which has not occurred) would be as follows: senior management of the Risk Management Department would bring the deficiency results to the attention of executive

management and the Board's Credit and Market Risk Management Committee for consideration of options. The steps taken may not be made explicitly known to Members (unless they result in a proposed Rule change, for example by modifying the Clearing Fund formula). However, management believes that Members are informed via the Rules as to the flexibility that the FICC-GSD has to take risk management-related actions (such as increasing a Member's Clearing Fund requirements if the FICC-GSD is concerned about a particular Member and determines a need to seek assurances of the Member's continuing financial responsibility in the form of increased Clearing Fund) in order to protect the FICC-GSD and its Members.

FICC-GSD engaged an external expert to conduct a comprehensive review of models/parameters/scenarios/frequency which was completed at the end of 2009.

The stress testing assumptions are not disclosed to participants.

Sufficiency of liquidity resources

FICC-GSD's financial resources consist of:

- (i) the cash in the Clearing Fund (amounting to US\$3.2 billion, end-2008);
- (ii) the cash obtainable by repoing the securities in the Clearing Fund (amounting to US\$15.4 billion in U.S. Treasury and Agency securities and US\$223 million in eligible mortgage backed securities);
- (iii) the cash that would be obtained by repoing the securities that would have been delivered to the defaulting member, had it not defaulted.

FICC-GSD began evaluating the sufficiency of its liquidity to cover the failure of the largest affiliated family. Affiliated family is defined the group of members that is under the control of the same organization, including the organization controlling all the others. A back test study of family liquidity requirements covering the period from 2008 through April 2009 showed that there was sufficient liquidity to cover the needs of the failure of any affiliated family 100 percent of the time assuming that the funding need could be fulfilled via the repo arrangement FICC-GSD established.

So far the member with the largest exposure identified in the FICC-GSD's stress tests has been adequately covered by FICC-GSD's total required Clearing Fund deposit. Back testing results demonstrate that FICC-GSD's Clearing Fund would be able to cover closeout losses of multiple Members. Specifically, the most recent back test showed that the sum of all back test losses of FICC-GSD Members is less than the sum of the required Clearing Fund deposits of Members.

Ability to draw on financial resources (Q2)

The legal enforceability of FICC-GSD's collateral arrangements is supported by the UCC and generally New York contract law. Although relevant insolvency laws can limit a secured party's rights to access and liquidate its collateral, the FDICIA provisions, the Code, FDIA and SIPA contain specific provisions to protect the clearing agency close-outs (including access to and retention of collateral). Additional financial resources to cover losses from participant defaults include FICC-GSD's retained earnings, and funds that may be payable to FICC-GSD under the cross-margining and cross-guaranty arrangements maintained with other clearing agencies.

Immediate availability of financial resources (Q3)

According to FICC, all the resources in the Clearing Fund that the FICC-GSD is relying upon to cover losses are held in accounts at the two clearing banks in the name of FICC-GSD.

The Clearing Fund cash is held in a tri-party repo agreement overnight and returned to a FICC-GSD bank account during the day for immediate access, if needed.

	Securities in the Clearing Fund are held at FICC-GSD's clearing banks and immediate access is available for repoing (for liquidity purposes), if needed. The FICC-GSD has not obtained committed credit lines to this end.
Assessment	Broadly observed.
Comments	 In order to be fully compliant, FICC-GSD should: consider additional liquid financial resources to use in case of extreme situations where repo agreements cannot be used; and, in particular; and minimize its exposure and concentration risk vis-à-vis the two clearing banks; consider conducting more frequent stress testing than once a month, in particular, in times of unusual market volatility; and disclose stress testing assumptions to participants.
	FICC-GSD's liquidity can be increased by repoing the securities in the Clearing Fund or the unpaid allocations of the defaulting members. However, this arrangement cannot be considered as a committed line, since there is no complete assurance that the repo markets would be effective in extreme market situations.
Recommendation 6.	A CCP's default procedures should be clearly stated, and they should ensure that the CCP can take timely action to contain losses and liquidity pressures and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.
Description	Definition of default and clarity of default procedures (Q1) The FICC-GSD's rules state clearly what constitutes a default. Under the FICC-GSD's rules, the FICC's Board of Directors or a delegated Board Committee may terminate or suspend a Member from any service if the Member becomes subject to a formal insolvency proceeding, the Member fails to perform its obligations to the FICC-GSD, the Board has reasonable grounds to believe that the Member has been responsible for fraudulent or dishonest conduct, or the Board has reasonable grounds to believe that the Member is in or is approaching significant financial difficulty.
	The FICC-GSD's rules provide it with the authority to promptly close out and manage the positions of a defaulting Member and to apply the defaulting Member's collateral. FICC-GSD Rule 22A, entitled "Procedures for When the Corporation Ceases to Act," provides that the close-out procedure shall be completed as promptly as possible after the FICC-GSD has given notice that it has ceased to act for a Member. The Rule provides the FICC-GSD with the ability to apply the proceeds of the liquidation, as well as all other funds and assets of the defaulting Member, to meet the defaulting Member's obligations to the FICC-GSD.
	Mechanisms outside of the CCP (the FICC-GSD treats its Members as principals) permit the transfer and liquidation of the positions and margin of customers of a defaulting participant. Specifically, the Securities Investor Protection Corporation (SIPC) which has been created by the SIPA, protects securities investors from financial harm if their broker-dealer fails. In the event of a failure of a broker-dealer, SIPC's primary responsibility is to organize the distribution of customer cash and securities to investors, and if the cash and securities are not available, SIPC provides insurance coverage of up to US\$500,000 of the customer's net equity balance.
	The rules and procedures empower the FICC-GSD to draw promptly on the available financial resources. The types of financial resources available to FICC-GSD are described in Recommendation 5.
	(Legal) enforceability of default procedures (Q2) The legal framework supports default procedures with a high degree of assurance. The 2005 Amendments (see response to key question 2(c) of Recommendation 1 above)

provide that the close-out and netting of transactions arising under the protected transactions may not be stayed or avoided in any bankruptcy proceeding brought under the Code, FDIA, or the SIPA (subject in the case of the SIPA, to certain exceptions not relevant for clearing organizations). In addition, legal comfort for the validity of the FICC-GSD's lien and collateral protections is found principally in the Uniform Commercial Code (Articles 8 and 9), and general New York contract law. Although relevant insolvency laws can limit a secured party's rights to access and liquidate its collateral, the FDICIA provision referred to above, the Code, FDIA, and SIPA contain specific provisions that would generally be applicable to FICC-GSD, to protect clearing agency close-outs (including access to and retention of collateral).

U.S. insolvency law permits the identification and separate treatment of customer and proprietary assets. For example, the insolvency of a U.S. broker-dealer with customer accounts will be handled by the Securities Investor Protection Corporation under the SIPA.

Internal plans for managing defaults (Q3)

FICC-GSD maintains a comprehensive closeout management framework to managing the insolvency and closeout of a participant. In addition, there are appropriate internal procedures in the event that FICC-GSD determines to cease to act on behalf of a participant. Periodic tests are conducted both for closing out a test broker's account, as well as testing borrowing under the company's liquidity arrangements. Each instance where FICC-GSD determines to cease to act is unique, and both FICC-GSD's Rules and internal procedures take this into consideration.

Appropriate co-ordination procedures are in place in cases where more than one CCP, authority or a separate market operator are involved. For example, the multilateral cross-guaranty agreement among the FICC-GSD, The Options Clearing Corporation, and the FICC-GSD's affiliates, NSCC and DTC, contemplates coordination in the event of the default of a common Member. The FICC-GSD's cross-margining agreement with the Chicago Mercantile Exchange provides for coordination between the two clearing corporations in the event of a default of a cross-margining participant. The FICC-GSD's Rules and internal procedures address the need to coordinate with applicable regulatory authorities.

The FICC-GSD's close out procedures are subject to ongoing review and development, including incorporating knowledge gained from internal tests, which occur at least once per year.

Transparency / publicity of default procedures (Q4)

The key aspects of the close out procedures are in the FICC-GSD's Rules which are available to Members and to the public generally at www.dtcc.com. In addition, if the FICC-GSD were to make a determination to cease to act on behalf of a Member, the FICC-GSD would provide notice of that action to Members via Important Notice and also communicate relevant details as to the resolution of open transactions to Members in the same manner. Important Notices are posted by FICC on its website, and are available to the public.

Assessment	Observed.	
Comments		
Recommendation 7.	A CCP should hold assets in a manner whereby risk of loss or of delay in its access to	
	them is minimized. Assets invested by a CCP should be held in instruments with minimal	
	credit, market and liquidity risks.	
Description	Monitoring of custody risk for CCP assets (Q1)	
	FICC-GSD's securities and cash held with settlement and the Clearing Fund is held in	
	FICC-GSD's account at the Bank of New York Mellon and JP Morgan Chase. FICC-GSD	
	relies on the strict regulatory framework in which these entities and DTC operate (which	

includes oversight and examination by the U.S. Federal banking regulators) to ensure the safety and accessibility of its clearing fund deposits. This includes regulation regarding the protection of customer securities from theft, loss, or misuse, and in the event of insolvency. Moreover, the two clearing banks being participants of the clearing agencies within DTCC are monitored from a financial and operational perspective. As to enforceability of collateral and/or ownership rights *see* responses to questions under Recommendation 1 above.

Investments of CCP resources (Q2)

Cash is generally invested in reverse repurchase agreements (repos) in debt obligations of the U.S. Government and U.S. Government Agencies guaranteed by the U.S. Government. The investments consist of tri-party repo arrangements using the standard legal documentation. Investments may also include direct purchase of debt obligations of the U.S. Government. When reverse repos are not available, funds may be sold to a clearing bank.

The risk of loss of invested funds is minimized in a number of ways. Repo investments are generally placed with financial institutions acting as principal rather than as agent, and with maturity limited to the next business day (with return of funds being required well before settlement) and are held under tri-party custodial agreements. FICC-GSD invests only with those repo counterparties assigned a long term debt rating of A- or better from one of the rating agencies. Reverse repo investments are secured; collateral must have a market value greater than or equal to 102 percent of the cash invested (an industry standard) and investment limits are placed on counterparties. A written confirmation of each security underlying the repo is also required to be provided by the custodian bank. A thorough financial review is performed on the custodian banks. This review includes the analysis of the custodians' quarterly regulatory reports, the application of certain financial parameters on a quarterly basis and the review of the custodians' annual reports.

Depending upon the results of these financial reviews, discussions will be held with appropriate staff of the custodian firms.

Concentration limits (Q3)

The overall exposure to a counterparty is considered when placing an investment. The Investment Policy establishes the credit limits by counterparty. The credit limits have been established to ensure that investments do not exceed an acceptable level of concentration with any single counterparty. The credit limits are monitored daily across all DTCC subsidiaries.

Assessment	Observed.
Comments	FICC-GSD should continue to monitor and mitigate the potential risks which result from holding assets at only two commercial banks. Moreover, FICC-GSD should to the greatest extent possible avoid unsecured investments.
Recommendation 8.	A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfillment of a CCP's obligations.
Description	The description for this recommendation is very similar to the one of DTC and NSCC given that DTC, NSCC and FICC are run in the same platform with however different applications (so that the unavailability of one does not affect the other systems' functioning) and business continuity arrangements are organized at the holding company level. **Identification and management of operational risk (Q1)** Business continuity requirements, sound practices, and objectives for U.S. infrastructure

are established in the "Interagency Paper on Sound Practices to Strengthen the Resiliency of the U.S. Financial System." In principle, DTC, NSCC, FICC, Euro CCP, and Trade Information Warehouse are different applications in the same mainframe. This does not create undue operational risk or interdependences on operational reliability since the applications of the various systems are clearly separated. There is a central Corporate Business Continuity function, which coordinates Business Continuity Plan (BCP) activities and planning for DTCC and all its subsidiaries.

DTCC identifies sources and mitigation tools for operational risks through a number of dedicated permanent groups: the Operational Risk Group (develops and oversees operational risk management program), the Internal Risk Management Committee (evaluates and coordinates the risk management activities within the company), a high level Security Committee (address key areas of security risks associated with information services), and the Internal Audit Department (reviews the adequacy of internal controls, procedures and records of the company with respect to operational risk), independent accountants.

Contingency plans and back-up facilities (Q2)

DTCC has a formal BCP aimed at addressing events posing a significant risk of disrupting its operations. DTCC operates data centers and staff in multiple locations. The BCP are tested several times in a year both from the technological and from the business perspective. In particular, DTCC contingency plans and back-up facilities for the failure of key systems are regularly tested. The out-of-region data centre is a warm site with 2 hour recovery capability. The site is fully staffed requiring no movement of personnel. Out of region business operations sites are hot sites. Contingency plans for the failure of the key systems are not tested with the participants. DTCC data centers in the New York region act as a single data centre vis-à-vis participants and therefore although the failure of one key system would be visible to participants, should the failure occur no action would be needed by participants to resume. Therefore this test is not considered relevant for the participants. It should be noted that while the connectivity test (from FICC-GSD and participants' first and secondary sites) is conducted with all FICC-GSD participants when then join the system, this test is then conducted on an annual basis only with participants deemed critical by FICC-GSD. However, DTCC does not test its back-up sites to participant backup sites for the critical participants.

DTCC currently uses the Banking, Infrastructure and Technology Services (BITS) Shared Assessments Program to both describe DTCC's Business Continuity and Information Security control structure in response to DTCC participant inquiries and to evaluate DTCC's service providers' Information Security controls.

Each year DTCC update a white paper describing the DTCC BCP program and make it available to participants on DTCC's website. In addition, DTCC has produced an "Out-of-Region" guide to aid clients in reconciling transactions in the unlikely event that DTCC is forced to move to its out-of-region processing site. Data centre failover tests are conducted 3-4 times per year. Business Operations tests are conducted throughout the year.

Adequate management controls and periodic independent audit

Operational reliability issues are regularly reviewed by DTCC's senior management, including managers not responsible for the relevant operations of FICC. Operational issues are also reviewed by internal audit as well as review by certified public accountants. Deloitte LLC, issued the most recent report for FICC on October 30, 2009, for the year ended June 30, 2009. These reports are available on the DTCC website.

Availability and scalability of the system

According to DTCC, no FICC-GSD key system has failed (nor any data lost) during the last year. FICC-GSD did not provide figures on the availability of the system and the

capacity utilization of the system (percent of fully available operating capacity as defined by an average of volume) to the assessor. DTCC has dedicated capacity planning staffing and ensures that FICC-GSD has sufficient capacity to meet operational needs in all data centers. In particular, With respect to processing capacity, FICC-GSD maintains sufficient capacity to meet processing demands in stressful market conditions. For clearance and settlement purposes, FICC-GSD can process in excess of 2 times their respective historical peaks in a processing day. capacity/utilization reports are generated and reviewed by the Infrastructure Department to track growth against projections and a yearly annual Capacity Planning Report is produced and presented to the Board of Directors, and to FICC's regulators. Assessment Observed. Comments Contingency plans and backup facilities for the failure of key systems are not tested and reviewed with participants (only connectivity is tested with the critical participants). FICC explained that the data centers in the New York region act as a single data centre and provide secondary back-up to both systems and the entire facility. In the event the New York region data centers are not available, the out of region recovery site is available to cover all critical systems. Failover and recovery of any data centre does not require changes by participants. The network automatically reroutes the client traffic from their primary or backup sites to the recovered data centre. Therefore, it is not relevant to test the failure of one key system with the participants. DTCC should test its back-up sites to critical participants' backup sites. Recommendation 9. A CCP should employ money settlement arrangements that eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risks from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected. Description Use of central bank money (Q1) The FICC-GSD uses the central bank model with a tiered settlement arrangement for its funds-only settlement process. For the settlement of DVP transactions, see Recommendation 10. The key components of a Member's funds-only settlement obligation at the FICC-GSD, which constitutes a minor amount of total FICC transactions, include: a mark-to-market amount for every net settlement position, a mark-to-market amount for every forward net settlement position, fail marks for obligations that were scheduled to settle and have not yet settled, coupon payments and other adjustments. The FICC-GSD funds-only settlement process is a cash pass-through process, i.e., those members who are in a debit position submit payments which are then used to pay Members in a credit position. The settlement for the funds-only settlement process occurs on the Federal Reserve's National Settlement Service ("NSS"). Because FICC-GSD does not have direct access to the Federal Reserve accounts and services, FICC relies on DTC to submit a file to the Federal Reserve Bank of New York where debits and credits are made to the settling banks' Reserve Bank accounts. This file lists debit or credit entries for particular depository institutions ("settlers" under Federal Reserve Operating Circular 12) that are acting as settling banks under FICC's rules. The Federal Reserve then processes the file, checking to see that settlement banks with a net debit entry have sufficient funds or credit in their Federal Reserve account to settle and if so, transferring the money to a temporary (technical) settlement account for the arrangement. Once all debits have been collected, funds are then credited to settlement banks in a net credit position. All debits and credits are final at the time they are made by the Federal Reserve. FICC-GSD Members are required to engage a settling bank that meets FICC-GSD's settling bank criteria to effect

funds-only settlement on the central bank's NSS on behalf of the Members. Finality of transfers (Q2) The funds transfers for FICC-GSD funds-only money settlement occur at the Federal Reserve. Funds transfers are immediately final when payment is effected on the Federal Reserve's NSS. Criteria for selection of settlement banks (Q3) FICC-GSD has established certain settling cash agent eligibility, criteria. Apart from the initial and ongoing membership requirements, settling cash agents should be a bank, trust company, or another entity with access to Reserve Bank account and services, including NSS. Monitor distribution of exposures among settlement banks (Q4) There is no major settlement bank concentration for funds-only settlement that takes place in the Federal Reserve. Observed. Assessment Comments Recommendation 10. A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed. Description CCP obligations for physical delivery (Q1) The FICC-GSD's Rules clearly set forth its obligations with respect to deliveries of the securities that it processes. The FICC-GSD processes transactions whose underlying securities are in book-entry form only. There are three basic underpinnings of the FICC-GSD's settlement process for netted positions: 1) every securities delivery, whether to or from the FICC-GSD, is made against full payment; the FICC-GSD does not hold securities during the day; rather, deliveries that come into the FICC-GSD ordinarily are instantaneously redelivered to another netting member (i.e., all movements are in a pre-matched, "bound" status); and all DVP settlements are made either over the Federal Reserve's Fedwire Securities Service or on the clearing bank's books; finality of settlement is obtained at the time of the securities movement. Since FICC is not a depository institution, it does not have direct access to Fedwire Securities and, therefore, employs the services of two clearing banks, the Bank of New York Mellon (BNY) and JPMorgan Chase Bank (JPMC), for this purpose. FICC-GSD Rule 12 (Securities Settlement) provides that the FICC/GSD shall notify each Member (prior to the entity activating its membership) of the clearing bank or banks that the FICC-GSD will use to deliver eligible securities to Members and to receive eligible securities from Members, and by product, the types of securities that each such clearing bank will so deliver and receive. In turn, each Member (prior to activating its membership) must notify the FICC-GSD of the clearing bank that the Member has designated to act on its behalf in the delivery of securities to the FICC-GSD and in the receipt of securities from the FICC-GSD. As stated above, obligations may be settled within a clearing bank, i.e., on the books of a clearing bank when they deliver and attendant receive obligation are at the same clearing bank. Otherwise, obligations are settled using Fedwire. All deliveries are made against full payment. Participation in the FICC-GSD's GCF Repo service requires dealer Members to have an account with either or both of BNY or JPMC. The clearing banks have an integral role in the GCF Repo service. DVP of mitigation of principal risks (Q2) The FICC-GSD is obligated to deliver securities to a Member with a net long position in order to settle such position. However, the FICC-GSD is not obligated to make such

Assessment Comments	deliveries until the day on which it receives from a Member with a net short position securities with the same CUSIP number that are at least equal in quantity to such net long positions and that have not been allocated for delivery to another Member. Liquidity, storage and delivery (other than principal) risks (Q3) Storage and delivery risks (such as warehousing and transportation of instruments) do not arise for the FICC-GSD because the underlying securities of the transactions that it processes are in book-entry form. Observed. As a systemically important CCP, FICC should have direct access to Fedwire Securities and Fedwire Funds services. Such an access will allow FICC to settle DVP in central bank money and reduce the settlement concentration to the two clearing banks. However, due to current legal constraint, this recommendation can only be met by either FICC being chartered as a bank or statutory changes that grant that the Federal Reserve legal authority to provide accounts and services to FICC.
Recommendation 11.	CCPs that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination between the relevant regulators and overseers.
Description	Sources of risks in links and compliance with RCCPs (Q1) There is no CCP-link in place but the FICC-GSD has implemented a cross-margining arrangement with the Chicago Mercantile Exchange (CME) and according to the self assessment has conducted the analyzes from a risk management perspective for this arrangement. Following the cross-margining agreement, (i) entities that are Clearing Members of both FICC-GSD and CME, and (ii) Clearing Members of either FICC-GSD or CME that have an Affiliate that is a Clearing Member of the other such Clearing Organization, may elect to have their Margin obligations in respect of positions in futures contracts and options on futures contracts in Eligible Products in their proprietary accounts at CME offset against their Margin obligations in respect of positions in Eligible Products at FICC-GSD to the extent permitted under the Agreement. The FICC-GSD and the participating futures clearing organization independently calculate
	applicable residual margin amounts based on their respective rules. In this regard, it is noted that the cross-margining agreement foresees that both clearing organizations should give sufficient notice to the other one before implementing any change in its rules if it relates to the clearing organization's clearing fund, contributions to capital, rights of assessment against its clearing members.
	Legal support for links (Q2) The cross-margining arrangement with the CME is governed by the laws of the State of New York. Besides, the cross-margining arrangement has been approved by the SEC. Moreover, cross-margining arrangements are also referred to in FICC-GSD Rule 43 (cross-margining arrangements) that sets the conditions to become a cross-margining participant. The cross-margining agreement and the cross-margining participant agreement for this specific arrangement with the CME is also available on DTCC's website.
	Ongoing monitoring of operational, liquidity and credit risk (Q3) According to FICC, the cross-margining agreement does not introduce new operational risks to the FICC-GSD. FICC-GSD and the CME limit their credit risk exposure by determining the participants that can use this arrangement and independently determining how much margin with regard to a participant's residual positions is adequate to protect them under the cross-margining agreement. Moreover, the agreement leaves the option to

FICC-GSD (and CME) to terminate the participation of a member to this arrangement if FICC-GSD (and CME) estimate that this would protect the clearing organization and its participants. Moreover, the agreement foresees loss sharing arrangements. The ongoing monitoring is conducted via the daily exchange of cross-margining data between the FICC-GSD and the CME. Besides it is noted that the activities of the CME are overseen by the Commodity Futures Trading Commission. The cross-margining agreement between FICC-GSD and the CME also foresees (in section 14 on information sharing) that both clearing organizations would provide information to the other one regarding their cross-margining participants for instance in case a special surveillance procedure is applied to a cross-margining participant; if more frequent reporting is required from a cross-margining participant; if the capital requirements for a cross-margining participants are increased; if higher margin requirements are imposed on a cross-margining participant. Moreover, the agreement also sets that the clearing organizations will inform each other of the total size and aggregate amount of required contributions to the clearing organization's clearing/guarantee fund. Co-operative (cross-border) oversight on links (Q4) There is a framework for cooperation between the CFTC and SEC. In addition, the CME and FICC-GSD participate in the Unified Clearing Group bringing together securities and futures clearing agencies in common interest topics (with CFTC, SEC and Fed as observers). Assessment Observed. Comments Recommendation 12. While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants. The description for this recommendation is very similar to the one of DTC and NSCC Description given that the procedures for controlling and reviewing risks and pricing are the same between the three subsidiaries of the DTCC group. Procedures to control risks and pricing (Q1) FICC-GSD's fees are cost based and FICC-GSD returns to its users excess net revenues not needed to fund its operations via rebates or refunds. DTCC performs periodic benchmarking studies to assess cost effectiveness in the market place. Pricing levels are reviewed against the cost of operations during the annual budget process in order to provide guidance to the Board of the price impact. Both Internal Audit and DTCC's external auditors review and test elements of the cost allocation methodology. Regular review of service levels and operational reliability (Q2) FICC surveys its participants to test and help ensure adherence to service levels on an annual basis. As described in RCCP13, some of the Committees of the Board of Directors are overseeing different aspects, covering the systems' operations. Besides, operational reliability is the subject of regular monitoring, the result of which is transmitted to IT, product and senior management on a monthly basis. An annual Capacity Planning Report considering the projected capacity growth for the year to come is submitted to the Board of Directors of DTCC and to its regulators. Assessment Observed. Comments Recommendation 13. Governance arrangements for a CCP should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In

Description

particular, they should promote the effectiveness of a CCP's risk management procedures.

The description for this recommendation is very similar to the one of DTC and NSCC given that there is a single governance structure organized at the holding company level.

Clarity and transparency of Governance arrangements (Q1)

DTCC is a holding company of DTC, FICC and NSCC, which are independent legal entities. DTCC common shareholders include approximately 362 banks, broker-dealers, mutual funds and other companies in the financial services industry participating in one or more of DTCC's clearing agency subsidiaries, including FICC.

Certain governance information is publicly disclosed and other information is not because it is confidential and proprietary in nature. At the time of this assessment only limited information is available to the public. DTCC is currently reviewing its corporate governance structure and anticipates that once any changes have been duly approved and publication authorized, certain additional information will be made publicly available.

Separation between reporting lines for risk management and other operations (Q2) There is a clear separation in the reporting lines between risk management and other operations of FICC, NSCC and DTC. The Chief Risk Officer reports directly to the Chairman and CEO. The board of directors has appointed a number of standing committees including a credit and market risk management committee/compliance and operational risk management committee/board committee/ core services operations and planning committee

Management incentives skills and accountability (Q3)

DTCC Management and the Board establish formal corporate goals yearly based on consultation with individual participants, members of the Board, Board committees, advisory committees, industry associations, regulators, and others. Management's performance is assessed by the Board against these goals through the review of status reports from the management and Board Committees. Through evaluation of management performance, and by linking compensation to performance (via the Board's Compensation Committee which is composed of non-management directors), the Board seeks to ensure that management has the incentives and skills needed to achieve the clearing agency's objectives, and that management is accountable for its performance.

Auditors have ensured that: 1) each service does not cross subsidizes the operating expenses and revenues of the others neither within each of the systems (DTC, NSCC and FICC) nor amongst them; and 2) the risk management financial resources (clearing funds, collateral, margins, etc.) are separately maintained and not co-mingled.

Board composition, expertise and relevant interest' representation

Currently the Board of DTCC is composed of 18 members including: two DTCC

Executives (CEO and COO), two members designated by the preferred shareholders

(NYSE and FINRA) and other members designated by the shareholders. There is currently no other non-participant Board members.

The members of the Board are elected for a one-year term, usually at the April shareholders meeting on the basis of the following procedure. Each year, the Board appoints members of the Governance Committee, who in turn, recommend nominees for directors to the Board after soliciting from participants of each clearing agency suggested nominees for election by common shareholders. The Committee standards in recommending nominees are designed to satisfy the fair representation requirement of Section 17A of the Exchange Act, and reflect other governance best practices. The Governance Committee has the responsibility to nominate persons for election as directors ensuring they meet the following criterion: ability to represent users of the services of each of DTCC's clearing and depository subsidiaries; ownership of DTCC common stock;

expertise; with respect to current directors, their length of service, attendance at Board and Committee meetings, and effectiveness; and adequate diversity on the Board.

Public interest objectives

FICC's public interest objectives are based upon section 17 A of the Securities Exchange Act under which the SEC is directed by the Congress, "having due regard for the public interest," to facilitate the establishment of a national system for the prompt and accurate clearance and settlement of securities transactions by, among other things, the registration of clearing agencies that have been determined by the SEC to meet the statutory standards of the Exchange Act.

The public's interest is taken into account by the SEC in its review of each proposed rule change filed with the SEC by FICC-GSD, i.e., the SEC has an obligation to receive and consider public comments on each filing. SEC rules provide that the public comment period for proposed rule changes is at least 21 days from the date a proposal is published in the Federal Register (unless the proposal meets the criteria for accelerated approval or immediate effectiveness). All registered clearing agencies (including DTC, NSCC and FICC), as self regulatory organizations, are required to publish notices of their proposed rule changes on their websites when they are filed with the SEC, with contact information for participants should they wish to provide comments to the clearing agencies directly (which the affected clearing agency would then forward to the SEC). This effectively provides participants with a longer period to review and consider specific proposals.

Moreover, FICC indicated that in case it is known that a proposal may have significant impact, the proposal is discussed with participants or participant groups (such as, for example, the relevant divisions of SIFMA), and FICC consults with its regulators before filing it formally. In addition to posting important notices on DTCC's website that advise Participants of the submission/approval of proposed rule changes, FICC-GSD staff participates in various industry groups where information is shared, both in advance of submitting a particular proposed rule change, or after the filing is submitted (for example, as the implementation date of an approved change approaches). DTCC also publishes various periodicals and newsletters to its clearing agency membership, that are targeted to the financial services industry, trade organizations, regulators and Participants, which provide news and information on various products, services, corporate initiatives and expanding business opportunities.

Assessment

Broadly observed.

Comments

For the observance of this recommendation, the governance arrangements for FICC should be more clearly specified and transparent, including criteria for the composition and selection of Board members.

Recommendation 14.

A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using its services.

Description

Disclosure of risk management information (Q1)

FICC-GSD's rules and procedure are publicly available on DTCC's website. FICC-GSD's rules are explicit as to when FICC-GSD assumes counterparty exposure. The rules also provide information on default procedures.

Information, such as explanatory service bulletins and guidelines on risk management measures, is communicated via Important Notices posted on DTCC's website, along with any rule filings. Information about key financial and operational risk is also publicly disclosed.

The website also contains general information about products and services as well as contact information.

In addition, SEC standards and FICC-GSD Rule 35 require that, after the end of each calendar year FICC-GSD provides its participants with annual audited financial statement prepared by an independent public accountant. FICC-GSD is also required to provide its participants with unaudited financial statements for each of the first three calendar quarters of each calendar year. The annual audited financial statements of FICC as well as the consolidated financial statements of DTCC are available on the DTCC website. www.dtcc.com. Accessibility of information (Q2) Information is provided in English and made available on FICC's website. Moreover, the system's management also responds to inquiries from participants and meets with them as may be requested to assist them to understand the rules and the risk implications thereof. Completion and disclosure of the answers to the key questions of RCCPs (Q3) FICC-GSD completed and disclosed the answers to the key questions from this assessment methodology. FICC-GSD self assessment based on the RCCP assessment methodology is published on DTCC's website after being reviewed by its senior management and approved by its Board of Directors prior to the publication. The review is conducted at least every two years, unless necessary before as a result of any material change to FICC-GSD's system or environment. Observed. Assessment Comments A CCP should be subject to transparent and effective regulation and oversight. In both a Recommendation 15 domestic and an international context, central banks and securities regulators should cooperate with each other and with other relevant authorities. Description The description for this recommendation is very similar to the one of NSCC as both CCPs have similar legal status and are subsidiaries of the DTCC group. Effective regulation and oversight (Q1) FICC is a clearing agency as defined by the Exchange Act and, as with all clearing agencies, is required to register with the SEC under section 17A of the Exchange Act unless granted an exemption from registration by the SEC. As a result, FICC as an entity is subject to full regulation under the Exchange Act (including but not limited to Section 17A) and is a self-regulatory organization that must meet all requirements with respect to SROs under the Exchange Act. In addition, the Federal Reserve is interested in FICC-GSD and its observance of the RCCPs given its important role in the government securities market and its importance for the stability of the overall financial system. Sufficient legal capacity and resources As a clearing agency, FICC is subject to comprehensive regulation and supervision by the SEC pursuant to the Exchange Act. The Federal Reserve coordinates with the SEC to conduct oversight, but the United States currently does not have a statute providing formal oversight authority to the central bank for non-bank payment, clearing, and settlement systems such as FICC. At the SEC, an estimated 51 staff are involved in whole or in part in clearing oversight (approximately 23 full-time equivalent staff positions). The SEC's oversight program encompasses staff from 7 different offices, including offices involved in legal and policy, examination and compliance, and automation review. Between FRBNY and the Board, about 20 budgeted officers and staff work full time on policy and oversight with respect to payment, clearing and settlement. Additionally, about

15 supervisory staff are dedicated full time to specific private sector systems; 9 examiners broadly dedicated to payment and settlement infrastructure and 12 more focused on systemically important clearing activities by banks and affiliates.

Definition and disclosure of objectives of central banks and securities regulators (Q2) The SEC's regulatory objectives, responsibilities, and main policies are defined and publicly disclosed. For example, the scope of the SEC's regulation of clearing agencies is defined by the Exchange Act, including Sections 17A and 19. The SEC has adopted rules to carry out these statutory responsibilities, such as the review of proposed rule changes. In order to assist registrants in meeting their statutory responsibilities, the SEC's Division of Trading and Markets has published standards regarding the objectives and requirements of clearing agency registration under Section 17A. In addition to publishing proposing and adopting releases for its own rules, the SEC also publishes concept releases and policy statements to educate industry participants as to the Commission's positions on different issues, such as straight-through processing, confirmation of trades, operational outages, and business continuity. These materials are publicly available from several sources, including the SEC's website (www.sec.gov).

The Federal Reserve also publishes policy statements which are readily available to the public. For example, the Federal Reserve's Policy on Payments System Risk is available at www.federalreserve.gov. Operating Circulars governing Reserve Bank services are available online at the Federal Reserve's Financial Services website at http://www.frbservices.org/. Other service related information, such as services offered, forms, agreements, schedules, and fees, can be obtained on this site.

As noted above, FICC-GSD is required to file with the SEC and make public all proposed rule changes. The information in each filing is required to be presented by FICC in a clear and comprehensible manner in order to enable the public to provide meaningful comment on the proposal and for the SEC to determine whether the proposal is consistent with the Act and applicable rules and regulations under the Act. SEC staff also maintains an active dialogue with FICC-GSD management.

Timely provision of oversight information to relevant authorities (Q3) FICC-GSD must submit proposed changes to rules and a description of the purpose of the proposed rule change to SEC. The term rule is defined broadly under the Exchange Act to include the constitution, articles of incorporation, bylaws, and rules, or instruments corresponding to the foregoing, of a clearing agency.

FICC-GSD is statutorily required to comply with several recordkeeping requirements set forth in the Exchange Act (Section 17) and SEC rules (Rule 17a-1 et seq.). For example, FICC-GSD must make and keep for prescribed periods such records, furnish such copies thereof, and make and disseminate such reports as the SEC, by rule, prescribes as necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of this Exchange Act. Under SEC rules, FICC-GSD must maintain business records related to its self-regulatory activities. These records must be held for a period of not less than five years, with the first two years in an "easily accessible place". SEC Rule 17a-6 sets forth the manner by which FICC-GSD may destroy/dispose of such documentation. All of these records are subject to periodic, special, or other examinations by representatives of the SEC. In certain instances, FICC-GSD also may be asked to furnish copies of materials upon request from its participants, other self-regulatory organizations, or other regulators. FICC is also required to notify the SEC of disciplinary actions it takes with respect to its participants, including but not limited to ceasing to act for a participant or denying access to services to a participant.

SEC staff conducts onsite examinations of registered clearing agencies, including FICC. Examination reviews may include such areas as internal audit, membership, member

financial surveillance, clearing fund and collateral risk, risk assessment and risk management systems, clearance and settlement processes, and liquidity. During examinations, FICC is required to provide examiners with documentation requested as part of the examination. The SEC conducts examinations on a regular basis and for cause where necessary. FICC-GSD is required to notify the SEC if it imposes a final disciplinary sanction on a participant, denies participation, limits access to services, or ceases to act for a participant and indicate the actions taken to resolve outstanding obligations.

In addition, FICC-GSD is required to submit all proposed rule changes to the SEC for review, notice, comment, and, with some limited exceptions, approval. Section 19 of the Exchange Act and the rules thereunder define the procedures by which self-regulatory organizations (SROs) must file proposed rule changes with the SEC and by which the SEC may approve or disapprove proposed rule changes. Certain proposed rule changes that (i) constitute a stated policy, practice, or interpretation with respect to the meaning, administration, or enforcement of an existing rule, (ii) establish or change a due, fee, or other charge, or (iii) are concerned solely with the administration of the self-regulatory organization may be effective upon filing, but all other proposed rule changes are approved by the SEC. In most cases, the proposed rule changes are approved by the SEC Division Trading and Markets, pursuant to delegated authority. For example, the SEC reviewed and approved the cross-margining arrangement and amendments thereto FICC-GSD put in place with the CME. A MOU with the CFTC is in place for issues of common interest.

In addition, the SEC has established an Automation Review Policy (ARP) applicable to SROs, including FICC-GSD. Under the policy, SROs voluntarily establish comprehensive planning and assessment programs to determine systems capacity and vulnerability. ARP also requests that SROs provide SEC staff with real-time notifications of significant system outages. ARP staff at the SEC also conducts IT-specific onsite examinations of FICC-GSD.

Domestic and cross-border cooperation (Q4)

The legal framework supports cooperation and coordination among the authorities. At the domestic level, the SEC and the Federal Reserve have signed exam-specific information-sharing arrangements regarding the oversight of FICC-GSD. The main principle underlying this framework is to provide for consolidated supervision and to stem systemic risk.

At the cross-border level, the SEC has entered into memoranda of understanding (MOUs) with regulators from non domestic institutions in particular for the exchange of information. The MOUs can be found on the SEC website.

Assessment

Observed.

Comments

The SEC has not formally required FICC-GSD to perform a self-assessment with respect to the CPSS-IOSCO recommendations. However, the SEC reviews the self-assessments currently prepared by the clearing agencies. Furthermore, compliance with SEC rules ensures compliance with most of the recommendations. SEC staff stated that it would consider recommending to the Commission that clearing agencies be required to perform self-assessments against the CPSS-IOSCO recommendations by rule or by policy statement. SEC is encouraged to do so, also with a view to encouraging consistency in the assessment of globally relevant systems and to facilitate co-operation with other authorities.

The Federal Reserve should be provided a legal mandate to oversee FICC, which is systemically important system as a complementary function to the existing SEC regulation and supervision.

Table 2. Summary of the Detailed Assessment of the Observance of Fixed Income Clearing Corporation – Government Securities Division (FICC-GSD) with the CPSS-IOSCO Recommendations for Central Counterparties

Responsibility	Grading	Comments
Legal risk		
1. A CCP should have a well founded, transparent and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.	0	
Participation requirement		
2. A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met on an ongoing basis. A CCP's participation requirements should be objective, publicly disclosed, and permit fair and open access.	O	FICC submitted a rule filing to SEC for expanding its membership to include some buy-side unregistered investment pools (UIP), such as hedge funds, as a new membership category. According to FICC, they will be able to monitor whether these entities comply with surveillance requirements on a contractual basis. Moreover, additional access requirements are intended to be imposed. In addition, certain buy-side entities, such as SEC-registered investment companies, are not permitted to mutualize losses, meaning that they may not become subject to a loss allocation that arises due to a default of a member with whom the registered investment company did not trade. In its filing to the SEC, FICC stated it will impose additional risk management measures with respect to UIP members, including calculating their Clearing Fund requirements at a higher value at risk confidence level and instituting an additional qualitative assessment requirement.
Measurement and management of credit exposures		
3. A CCP should measure its credit exposures to its participants at least once a day. Through margin requirements, other risk control mechanisms or a combination of both, a CCP should limit its exposure to potential losses from defaults of its participants in normal market conditions so that the operations of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.	O	The definition of margins and clearing funds in the public assessment should be made more consistent in line with international usage/practice and the definitions provided in the glossary of the RCCP. It will be beneficial (especially for non-U.S. CCPs that intend to establish links with FICC-GSD) to clarify the terminology. FICC-GSD management stated that they would clarify this terminology in the next revision of the self-assessment.

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Responsibility	Grading	Comments
Margin requirements		
4. If a CCP relies on margin requirements to limit its credit exposures to participants, those requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.	0	
Financial resources		
5. A CCP should maintain sufficient financial resources to withstand, at a minimum, a default by the participant to which it has the largest exposure in extreme but plausible market conditions.	ВО	 In order to be fully compliant, FICC-GSD should: consider additional liquid financial resources to use in case of extreme situations where repo agreements cannot be used; and, in particular; and minimize its exposure and concentration risk vis-à-vis the two clearing banks; consider conducting more frequent stress testing than once a month, in particular, in times of unusual market volatility; and disclose stress testing assumptions to participants. FICC-GSD's liquidity can be increased by repoing the securities in the Clearing Fund or the unpaid allocations of the defaulting members. However, this arrangement cannot be considered as a committed line, since there is no complete assurance that the repo markets would be effective in extreme market situations.
Default procedures		
6. A CCP's default procedures should be clearly stated, and they should ensure that the CCP can take timely action to contain losses and liquidity pressures and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.	O	
Custody and investment risk		
7 A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market and liquidity risks.	O	FICC-GSD should continue to monitor and mitigate the potential risks that result from holding assets at only two commercial banks. Moreover, FICC-GSD should to the greatest extent possible avoid unsecured investments.

Responsibility	Grading	Comments
Operational risk		
8. A CCP should identify sources of operational risk and minimize them through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfillment of a CCP's obligations.	O	Contingency plans and backup facilities for the failure of key systems are not tested and reviewed with participants (only connectivity is tested with the critical participants). FICC explained that the data centers in the New York region act as a single data centre and provide secondary back-up to both systems and the entire facility. In the event the New York region data centers are not available, the out of region recovery site is available to cover all critical systems. Failover and recovery of any data centre does not require changes by participants. The network automatically reroutes the client traffic from their primary or backup sites to the recovered data centre. Therefore, it is not relevant to test the failure of one key system with the participants. DTCC should test its back-up sites to critical participants' backup sites.
Money settlements		
9. A CCP should employ money settlement arrangements that eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risks from the use of banks to effect money settlements with its participants. Funds transfers to a CCP should be final when effected. Physical deliveries 10. A CCP should clearly state its obligations with respect to physical	0	As a systemically important CCP, FICC should have direct access to Fedwire Securities and Fedwire Funds
deliveries. The risks from these obligations should be identified and managed.		services. Such an access will allow FICC to settle DVP in central bank money and reduce the settlement concentration to the two clearing banks. However, due to current legal constraint, this recommendation can only be met by either FICC being chartered as a bank or statutory changes that grant that the Federal Reserve legal authority to provide accounts and services to FICC.
Risks in links between CCPs		
11. CCPs that establish links either cross- border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination between the relevant regulators and overseers.	0	

Responsibility	Grading	Comments
Efficiency		
12. While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.	O	
Governance		
13. Governance arrangements for a CCP should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In particular, they should promote the effectiveness of a CCP's risk management procedures.	ВО	For the observance of this recommendation, the governance arrangements for FICC should be more clearly specified and transparent, including criteria for the composition and selection of Board members.
Transparency		
14. A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using its services.	0	
Regulation and oversight		
15. A CCP should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should cooperate with each other and with other relevant authorities.	O	The SEC has not formally required FICC-GSD to perform a self-assessment with respect to the CPSS-IOSCO recommendations. However, the SEC reviews the self-assessments currently prepared by the clearing agencies. Furthermore, compliance with SEC rules ensures compliance with most of the recommendations. SEC staff stated that it would consider recommending to the Commission that clearing agencies be required to perform self-assessments against the CPSS-IOSCO recommendations by rule or by policy statement. SEC is encouraged to do so, also with a view to encouraging consistency in the assessment of globally relevant systems and to facilitate co-operation with other authorities. The Federal Reserve should be provided a legal mandate to oversee FICC, which is a systemically important system, as a complementary function to the existing SEC regulation and supervision.

Table 3. Actions to Improve Compliance

Reference Recommendation	Recommended Action
Recommendation 3: credit exposures management	Align the definitions of margins and clearing funds with international ones.
Recommendation 5: Financial resources	Consider additional liquid financial resources to use in case of extreme situations where repo agreements cannot be used.
	Minimize FICC's exposure and concentration risk vis-à-vis the two clearing banks.
	Consider conducting more frequent stress testing than once a month, in particular, in times of unusual market volatility.
	Disclose stress testing assumptions to participants.
Recommendation 7: Custody and investment risk	Continue to monitor and mitigate the potential risks, which result from holding assets at only two commercial banks.
	Avoid to the largest extent possible unsecured investments.
Recommendation 8: Operational risk	Test and review FICC backup sites to critical participants' backup sites.
Recommendations 10: Physical deliveries	Provide FICC direct access to Fedwire Securities and Fedwire Funds services to settle DVP transactions in central bank money.
Recommendation 13: Governance	FICC's governance arrangements should be more clearly specified and transparent, including criteria for the composition and selection of Board members.
Recommendation 15: Regulation and oversight	SEC should formally require FICC to perform a self-assessment with respect to the CPSS-IOSCO recommendations.
	Ensure the compliance of the SEC rules with the CPSS/IOSCO Recommendations.
	Provide legal mandate to the Federal Reserve to oversee FICC, which is systemically important system, as a complementary function to the existing SEC regulation and supervision.

Authorities' response to the assessment

- 1. The U.S. authorities welcome the IMF's assessment of the Fixed Income Clearing Corporation (FICC) against the CPSS-IOSCO Recommendations for Central Counterparties (RCCP). We appreciate the significant undertaking associated with an FSAP review of the biggest financial sector in the world, as well as the challenges that accompany the first assessment of a large advanced country in the wake of the crisis.
- 2. The authorities are pleased to note that the IMF's assessment reflects the high degree of compliance of FICC with the RCCPs, and will work with FICC in considering the assessment's specific comments and recommendations.
- 3. Again, the authorities appreciate the significant undertaking associated with the assessment of FICC and the contribution that the assessment process makes to the stability and effective regulation and oversight of systemically important payment, clearing and settlement systems.