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December 12, 2016

Robert E. Feldman
Executive Secretary
Federal Deposit Insurance Corporation
550 17th Street NW,
Washington, DC 20429
Attention: Comments

By email: comments@FDIC.gov

Re: FDIC RIN 3064–AE46; Restrictions on Qualified Financial Contracts of Certain FDIC-Supervised Institutions; Revisions to the Definition of Qualifying Master Netting Agreement and Related Definitions

Dear Sir:

The Depository Trust & Clearing Corporation ("DTCC") appreciates this opportunity to submit comments on the Notice of Proposed Rulemaking regarding Restrictions on Qualified Financial Contracts of Certain FDIC-Supervised Institutions; Revisions to the Definition of Qualifying Master Netting Agreement and Related Definitions (the "Proposed Rule"), published by the Federal Deposit Insurance Corporation (the "FDIC").[1] The Proposed Rule would require a covered FSI[2] to ensure that all covered qualified financial contracts ("QFCs") to which it is a party contain contractual stay-and-transfer provisions and limit the exercise of default rights based on the insolvency of the covered bank or an affiliate of the covered bank. The Proposed Rule seeks to protect covered FSIs by ensuring that the QFCs entered into by global systemically important banking organizations ("GSIBs") do not threaten the stability or safety and soundness of covered banks individually or collectively. DTCC fully supports this goal.

[1] 81 Fed. Reg. 74326 (October 26, 2016).

[2] A covered FSI includes any state savings association or state non-member bank that is a direct or indirect subsidiary of (i) a global systemically important bank holding company that has been designated pursuant to the Federal Reserve Board's Regulation YY, or (ii) a global systemically important foreign banking organization that has been designated pursuant to the Federal Reserve Board's Regulation YY, and any subsidiary of a covered FSI.

The Proposed Rule is also a parallel proposal to the notice of proposed rulemaking issued by the Board of Governors of the Federal Reserve System ("Board") on May 3, 2016 ("Board Proposal"), as well as to the notice of proposed rulemaking issued by the Office of the Comptroller of the Currency ("OCC") on August 19, 2016 ("OCC Proposal", and together with the Board Proposal and the Proposed Rule, the "Prudential Proposals"). DTCC commends the FDIC's coordination with the Board and the OCC, and strongly encourages the FDIC to continue to work in tandem with the Board and the OCC as it looks to finalize these rules. Regulatory harmonization in this regard is critical to avoid unintended consequences, promote market stability, and protect against regulatory arbitrage. Given the substantive similarities among the Prudential Proposals, DTCC's comments to the Board Proposal and the OCC Proposal are also relevant here.[3]

In particular, we would like to highlight comments surrounding the proposed exemption for QFC transactions to which a central counterparty is a party ("CCP Exemption"). While we believe the CCP Exemption is necessary and appropriate, the Proposed Rule fails to exempt other QFCs that are processed through or subject to the rules of central counterparties or other entities that fall within the definition of "financial market utility" ("FMU") under the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act").[4] Specifically, proposal section 382.1 defines a central counterparty ("CCP") by reference to the definition of CCP in Part 324.2 of the FDIC's regulations. Part 324.2 defines the term CCP to mean "a counterparty (for example, a clearing house) that facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts."[5] This definition excludes other types of FMUs and FMU services that support the clearance and settlement of QFCs but do not involve the novation of contracts to a CCP.

FMUs serve an important role in the U.S. financial markets and have been described by the Financial Stability Oversight Council ("FSOC") as the "plumbing of the financial system for their role in clearing and settling transactions between financial institutions".[6] Three DTCC subsidiaries, National Securities Clearing Corporation ("NSCC"), Fixed Income Clearing Corporation ("FICC"), and The Depository Trust Company ("DTC") (collectively, the "DTCC

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[3] *See* DTCC Letter to the Board re: Restrictions on Qualified Financial Contracts of Systemically Important U.S. Banking Organizations (Aug. 5, 2016), *available at* https://www.federalreserve.gov/apps/foia/ViewComments.aspx?doc_id=R-1538&doc_ver=1 (the "DTCC Board Letter") and DTCC Letter to the OCC re: Mandatory Contractual Stay Requirements for Qualified Financial Contracts (Oct. 17, 2016), *available at* https://www.regulations.gov/document?D=OCC-2016-0009-0008 (the "DTCC OCC Letter").

[4] The term "financial market utility" is defined in section 803(6) of the Dodd-Frank Act as "any person that manages or operates 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 person." 12 U.S.C. § 5462(6).

[5] See 12 CFR 324.2.

[6] FSOC Makes First Designations in Effort to Protect Against Future Financial Crises (2012), *https://www.treasury.gov/press-center/press-releases/Pages/tg1645.aspx* (last visited Nov. 22, 2016).

Entities"), are FMUs that are registered clearing agencies with the U.S. Securities and Exchange Commission and that have been designated as systemically important pursuant to the Dodd-Frank Act by the FSOC because of their role in the U.S. financial markets. A brief description of the core services and functions performed by each of the DTCC Entities (as excerpted from each DTCC Entity's public "Disclosure under the Principles for Financial Market Infrastructures"[7]), which support the clearance and settlement of QFCs (including CCP and non-CCP services) are included as Appendices A, B and C to this Letter.

For the reasons described in the DTCC's comment letter to the Board Proposal, we urge the FDIC to expand the CCP Exemption to apply to all FMUs, the QFC transactions they facilitate and certain related agreements. In particular, we respectfully request:

- That "FMU" be defined for these purposes by reference to the definition provided in section 803(6) of the Dodd-Frank Act and include any non-U.S. entity that satisfies this definition.[8]

- That the final rules exclude from their requirements:

(i) any QFC that is cleared, processed, or settled through the facilities of an FMU or that is entered into subject to the rules of an FMU[9]; and

(ii) any security agreement or arrangement, guaranty, reimbursement obligation or other credit enhancement between participants of an FMU that is directly related to any QFC described in category (i) above.[10]

If expanded as proposed, the CCP Exemption would also apply to non-CCP FMUs, as well as to the full range of QFC transactions that are facilitated by these entities, and the credit enhancements that support these entities and transactions, while preserving the application of the rule's requirements to the bilateral term QFC transactions that are the focus of the rule. As described in the DTCC Board Letter, this approach would align the Proposed Rule with the approach taken in other jurisdictions, including Germany and the United Kingdom.

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[7] The complete "Disclosure under the Principles for Financial Market Infrastructures" for each of the DTCC Entities is available at http://www.dtcc.com/legal/policy-and-compliance.

[8] 12 U.S.C. § 5462(6).

[9] DTCC notes that this approach would be consistent with section 210(c)(8)(G) of the Dodd-Frank Act, which references qualified financial contracts that are cleared by or subject to the rules of a clearing organization.

[10] In addition, we note that other commenters are concerned that the proposed rules do not take into account other clearing models because the proposed CCP Exemption would not cover principal-to-principal clearing arrangements whereby clearing members enter into matching back-to-back QFCs with their customers that mirror the transactions they enter into with an FMU. In other words, the customer-facing leg of the transaction would be stayed even if the FMU terminated the cleared QFC with the clearing member. In this regard, we suggest expanding our proposed language to cover any QFC that is entered into by a participant of an FMU with its customer whose terms are the economic equivalent of a QFC described in category (i), but only to the extent that the FMU has terminated the related QFC with the participant.

We appreciate the opportunity to comment on the Proposed Rule. Should you wish to discuss these comments further, please contact me at 212-855-3240.

Sincerely yours,

Larry E. Thompson

Vice Chairman and General Counsel

Appendix A - NSCC

Key Services: System Design and Operation

The following is a brief description of the core services and functions performed by NSCC.

Trade Capture

NSCC's core services are trade capture, and clearance and settlement through its Continuous Net Settlement ("CNS") System. Trade capture, the first step in the clearance and settlement process, involves the daily receipt of trade data from over 50 trading venues in the United States, including all U.S. securities exchanges and from automated trading facilities, and from NSCC Members[1] submitting transaction data directly. That data is then compared or recorded. Trade comparison consists of validating and matching the buy and sell sides of a securities transaction, and results in a compared trade that is reported to Members. Today over 99% of trade data is submitted to NSCC on a "locked-in" basis, meaning that it is already compared by the marketplace of execution. When submitted, locked-in trades are validated and recorded, via NSCC's Universal Trade Capture ("UTC") system, and reported to Members. The only trade comparison currently being done by NSCC is for fixed income (corporate and municipal bond) securities processing[2]; NSCC also, separately, offers Members a service to enable them to match over-the-counter ("OTC") transactions that are not otherwise generally matched through other facilities (the Obligation Warehouse service, or "OW", described below).

CNS

Compared and recorded transactions in CNS-eligible securities are processed in the CNS system. To be CNS-eligible, a security must be eligible for book-entry transfer on the books of DTC, and must be capable of being processed in the CNS system; for example, securities may be ineligible for CNS processing due to certain transfer restrictions (e.g., 144A securities) or due to the pendency of certain corporate actions[3]. Under the CNS system, all eligible compared and recorded transactions for a particular settlement date are netted by issue into one net long (buy) or net short (sell) position per Member. As a continuous net system, those positions are further netted with positions of the same issue that remain open after their originally scheduled settlement date (usually T+3), so that trades scheduled to settle on any day are netted with fail positions to result in a single deliver or receive obligation for each Member for each issue in which it has activity. NSCC becomes the contra-party for settlement purposes, 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. CNS netting thus reduces the costs associated with securities transfers by reducing the number of securities movements

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[1] NSCC has several types of membership with different access levels to services. For ease of description, when summarizing various services and NSCC Rules in this Disclosure Framework, unless otherwise indicated by the context, the term "Member" is used throughout to denote a full-service participant that has access to NSCC's CCP services; the term "participant" is used to denote all membership categories.

[2] With respect to fixed income securities (corporate and municipal bonds), virtually all transactions are effected in the over-the-counter markets and submitted to NSCC directly by Members on a bilateral basis. Average daily fixed income transaction volume is less than 1% of NSCC's daily volume.

[3] Securities and/or transactions that are not processed in the CNS system may be processed as Balance Orders (described below), or on a trade-for-trade basis, depending on the security, the transaction and the nature of the participants party to the transaction. For example, 144A securities settle on a trade-for-trade basis. Similarly, same day settling equity trades that are received by NSCC after the applicable cutoff time would settle on a trade-for-trade basis. NSCC does not guarantee trade-for-trade settlement.

required to settle transactions. In 2013, NSCC reduced the value of obligations requiring settlement by 97.0% or US$200.3 trillion, from US$207.2 trillion to US$6.9 trillion.

CNS relies on an interface with DTC for the book-entry movement of securities to settle transactions. CNS short positions are compared against Members' DTC accounts to determine availability of securities for delivery. If securities are available, they are transferred from the Member's account at DTC to NSCC's account at DTC to cover the Member's short obligations to CNS. To control the automatic delivery of securities from their DTC accounts (for example, to prevent the automatic delivery of customer fully-paid securities), Members can use CNS exemption procedures. Partial settlements are permissible.

The allocation of CNS long positions to receiving Members is processed in an order determined by an algorithm built into the system. Securities are automatically allocated to Members' long positions as the securities are received by NSCC. Members can request that they receive priority for some or all issues on a standing or override basis. Submission of buy-in notices and other specified activity will also affect the priority of a Member's long position.

Daily money settlement for CNS activity is based on the value of all settled positions plus or minus mark-to-the-market amounts for all open CNS positions, and occurs through NSCC. The CNS deliveries made through DTC are made free of payment.

When DTC and NSCC moved to same day funds settlement in 1996, certain cross-guarantees and arrangements between NSCC and DTC were established to permit transactions to flow smoothly between DTC's system and the CNS system in a collateralized environment. Under this arrangement, DTC provides a guarantee to NSCC of all CNS long allocations (deliveries from CNS), and NSCC provides a guarantee to DTC for all CNS short covers (i.e., deliveries from the broker to CNS to satisfy a CNS delivery obligation). These guarantees ensure, among other things, that debits created in DTC's system continue to be collateralized when the securities serving as collateral are delivered into the CNS system as short covers and reduce risk at NSCC by ensuring that long allocations, or the approximate value of long allocations, will be made available to NSCC to cover certain exposures. These arrangements are described in more detail in response to Principle 20 (FMI Links) below.

Balance Order processing

For securities that are ineligible for processing in CNS, NSCC provides a Balance Order Accounting system that produces netted and allotted receive and deliver instructions for NSCC Members. The portion of a Balance Order that is settled through NSCC is the "Clearance Cash Adjustment", which is essentially a mark-to-market payment of the netted position to effectively bring the netted position contract price to a common market price at the time when Balance Order receive and deliver order instructions are issued by NSCC. The Clearance Cash Adjustment is not linked to the actual settlement of the Balance Order; it is due irrespective of whether the securities settle on the scheduled settlement date. Its purpose is to enable the processing of netted and allotted Balance Orders, by providing an adjustment to a common mark-to-market price. Settlement of this funds amount is part of NSCC's Balance Order trade guaranty, described in further detail in Addendum K to NSCC's Rules. NSCC does not become a counterparty to Balance Order transactions, but does provide a trade guaranty to the receive and deliver parties, which remains effective through the close of business on the scheduled settlement date. The settlement of Balance Order transactions generally occurs outside of NSCC. As a result, NSCC's guaranty for these transactions is effectuated as follows: In the event of the insolvency of a Member, Members are required to close out the open guaranteed Balance Order transactions they had with the insolvent party and report gains or losses to NSCC. Any gains must be paid to NSCC, and NSCC will cover the losses on such closed-out transactions.

Money Settlement

Members are obligated to designate a settling bank to effect daily money settlement on their behalf. Members may designate a settling bank of their own choosing, provided the bank meets certain financial criteria, is a Federal Reserve member, and agrees to settle through use of the Federal Reserve System's National Settlement Service ("NSS"). Money settlement at NSCC occurs at the end of the day and, from an operational perspective, is centralized with DTC's end-of-day money settlement so as to provide common participants with consolidated reporting and a single point of access for all settlement information.

Throughout the day, money debit and credit data generated by participant activities are recorded in the settlement system. At the end of the processing day, the data is summarized by NSCC product category (i.e., CNS, Mutual Fund Services, insurance services, Envelope Settlement Services, etc.) and netted to produce an aggregate money debit or credit for each participant. Similarly, DTC activity is also recorded and netted, separately. Following the determination of final net numbers for each participant for each clearing agency, these amounts are further netted to produce a consolidated net money settlement obligation. So, for example, a participant with a settlement debit at NSCC and a settlement credit at DTC will have that debit netted against the DTC credit.

Settling banks, who may settle on behalf of multiple NSCC Members and/or DTC Participants, must separately acknowledge the respective settlement balances of their customer participants at each clearing agency. The consolidated net balances of their respective participant customers are then further netted to produce a single net-net settling bank consolidated debit or credit. Settlement of these net-net balances occurs through use of the NSS, whereby DTC, on its own behalf and as NSCC's settlement agent, submits instructions to have the Federal Reserve accounts of the settling banks charged for their net-net debit balances and credited with their net-net credit balances.

Correspondent Clearing / Special Representative Service

This service permits NSCC Members to clear and settle transactions executed for them by other Members acting as Special Representative (executing broker) (i) to accommodate a Member with multiple affiliate accounts that wishes to move a position resulting from a trade in the process of clearance from one of its affiliates to another; and (ii) to accommodate a Member that relies on its Special Representative to execute a trade in any market on its behalf to enable the resulting position to be moved from the Special Representative to that Member.

Through NSCC's Correspondent Clearing Service, the NSCC Member acting as Special Representative submits offsetting trades to NSCC for transactions it has executed on behalf of the Member. If the original trade is a purchase order, the Special Representative would input a transaction where it is the seller and the Member is the buyer, effectively netting the Special Representative out of the original transaction. Correspondent Clearing transactions are processed through NSCC's UTC system.

Additional services

In addition to the core services described above, NSCC offers a number of other services, developed over the years in response to industry requests and initiatives. These services—which are not guaranteed by NSCC and for which it does not act as a CCP—include:

Wealth Management and Insurance Services. NSCC provides a family of non-guaranteed services to support mutual funds, alternative investment products and insurance products. NSCC's Mutual Fund Services are the industry standard for processing fund transactions, communicating account-related

information, and linking fund companies with their network of distribution firms. The Fund/SERV® service automates purchases, registrations, redemptions and settlement of fund transactions. Other Mutual Fund Services capabilities include coordinating account information between funds and firms; processing defined contribution transactions; settling commission and fee payments; transferring accounts between firms, and assets in IRAs between fund companies; and, through the Mutual Fund Profile Service, providing a centralized repository for information about funds, including information contained in a fund's prospectus.

Alternative investment products are primarily private investment vehicles that are purchased, redeemed and valued periodically rather than being valued and processed on a daily basis. NSCC's services with respect to these products include the automated processing of new accounts, purchases and redemptions, position reporting, activity reporting, fund offering terms and valuation, and commission payments.

NSCC's Insurance and Retirement Processing Services ("Insurance Services") include processing of annuity and life insurance policy applications and premiums, licensing and appointments, commission payments, reporting of positions and valuations, asset pricing, financial activity reporting and annuity customer account transfers. The aim of these services is to automate and provide seamless end-to-end communication between insurance carriers, distributors and their solution providers for the sale, processing and money settlement of insurance products nationwide.

Automated Customer Account Transfer Service ("ACATS"). ACATS provides NSCC Members with the ability to transfer customer accounts and assets from one firm to another. To accomplish this in an automated fashion, the service interfaces with CNS (through a separately tracked account) for the delivery and settlement of CNS-eligible securities, with Fund/SERV® to expedite the re-registration of mutual fund positions, with Insurance Services to facilitate the re-registration of annuity positions, and with DTC for (non-CNS) DTC-eligible securities.

Envelope Settlement Services ("ESS"). ESS standardizes and controls Member-to-Member physical delivery of securities in the New York metropolitan area. The Inter-city Envelope Settlement Service standardizes and controls the physical delivery of securities among Members between New York and Toronto.

Obligation Warehouse ("OW"). OW is a service that supports real-time bilateral matching of failed obligations and of transactions that are not otherwise submitted by the applicable marketplaces or Members themselves for trade comparison or recording through other NSCC trade capture services. Obligations held in the OW are maintained until they are either closed or cancelled. For example, on a daily basis the OW adjusts obligations for certain applicable corporate actions, and checks obligations for CNS eligibility. CNS-eligible obligations are exited from the OW and forwarded to CNS. Additionally, failed non-CNS obligations are periodically re-priced and re-netted.

DTCC Limit Monitoring. Introduced in 2014, DTCC Limit Monitoring is an NSCC service that provides NSCC Members with a way to monitor trading activity on a post-trade basis, and is intended to supplement Members' existing internal risk management processes. Through this service, NSCC Members can monitor trading activity against limits that they have pre-set, and can review notifications that are delivered when these pre-set limits are being approached and when they are reached. (Any actions Members determine to take in response to these alerts is their responsibility and is taken away from NSCC.)

Risk management

Risk management is the foundation for NSCC's ability to guarantee settlement, as well as the means by which it protects itself and its Members from the risks inherent in the settlement process. Procedures are in place to ensure that Members comply with NSCC's Rules. NSCC maintains strict membership standards, including minimum financial requirements and Members are subject to ongoing review following admission. NSCC's Clearing Fund addresses potential Member exposure through a number of risk-based component charges (as margin) calculated and assessed daily. In addition, NSCC maintains liquidity resources, including a committed credit facility. The Clearing Fund, together with these resources, provide NSCC with sufficient liquidity to complete end-of-day money settlement. The Clearing Fund (which, in the aggregate, also operates as NSCC's default fund) provides the collateralization required to cover a Member's exposure. The Clearing Fund consists of deposits posted by Members in the form of cash and eligible securities. NSCC's key risk management practices and procedures, including its process for closing out the open positions of a defaulting Member and allocating any consequent losses, are discussed in more detail under Principles 3 through 7 and Principle 13. To date, including through the 2008 well-publicized broker-dealer closeouts, NSCC has never invoked its membership loss allocation procedures.

Appendix B - FICC

Key Services: System Design and Operation

FICC operates under two divisions—GSD and MBSD.

I. Government Securities Division

GSD offers a suite of services to support and facilitate the submission, comparison, risk management, netting and settlement of trades executed by its Members in the U.S. Government securities market. GSD provides a guaranty of settlement of all compared trades and serves as the central counterparty for the settlement obligations it novates. GSD processes buy-sell transactions of U.S. Government securities, repurchase agreement ("repo") transactions, including overnight, forward-start and term repo transactions, and GCF Repo® transactions.

The following is a brief description of the core services and functions performed by GSD.

A. Trade Comparison/Real-Time Trade Matching

The crux of GSD's comparison system is its Real-Time Trade Matching ("RTTM®") service. This is an interactive tool that enables Members to automate the processing of their securities trades throughout the trading day. Using standardized international message formats, RTTM® provides a common platform for collecting and matching trade data, enabling the parties to a securities trade to monitor and manage the status of their trades in real time. The result is an immediate confirmation for trade executions that is legal and binding. RTTM® creates a streamlined and operationally efficient processing environment. It maximizes the volume of trades that match on trade date, and it reduces the risk of mismatched securities trades by allowing trading parties to note and fix errors or potential problems in execution or processing as close as possible to trade execution.

Because real-time trade information is recorded immediately, RTTM® further safeguards Members in the event of an interruption of business at a Member firm level or all across the industry.

Upon trade execution, GSD Members submit all mandatory trade details to the RTTM® system to be matched with the trade details submitted against them by their counterparties.

A trade is deemed compared by GSD at the point in time at which GSD makes available to the Members on both sides of a transaction output (i.e., a report), indicating that their trade data have been compared. As noted above, a trade compared by GSD constitutes evidence of a valid, binding and enforceable contract. Upon comparison, GSD provides a guaranty of settlement (i.e., makes the counterparty whole), provided that the trade meets the requirements of the GSD Rules and was entered into in good faith.

B. Netting and Settlement

GSD's netting system typically reduces the costs associated with securities transfers by reducing the number of securities movements required to settle transactions.

Once the trades for GSD Members have compared, they enter into GSD's Netting System. Through netting, GSD establishes a single net long or short position for each Member's daily trading activity in a given security. The Member's net position is the difference between all purchases (long) and all sales (short) in a given security. GSD replaces each net position with a settlement obligation for the scheduled settlement date whereby the Member settles with GSD as CCP.

Settlement occurs after GSD has informed its Members of their respective obligations (principally on the night of trade date in a T+1 market). Settlement occurs on the Federal Reserve's Securities Service

System (“Fedwire®”) or on the books of FICC’s designated clearing bank. Members in turn instruct their clearing bank to transfer securities to one of GSD’s two clearing banks—The Bank of New York Mellon (“BNY”) and JPMorgan Chase (“JPM”). FICC, acting as a CCP, receives the securities and turns the securities to the ultimate net buyers.[1]

On each business day, GSD makes available to each Member output (i.e., a report) that provides information that GSD deems sufficient to enable such Member to settle its net settlement positions on that business day.[2] Each Member, based on the information provided by GSD, then provides appropriate instructions to its clearing bank to deliver to GSD and/or to receive from GSD, on behalf of the Member, eligible netting securities against payment or receipt at the appropriate settlement value.

Obligations may be settled within a clearing bank (i.e., on the books of a clearing bank) when the deliver and attendant receive obligation are at the same clearing bank; otherwise, obligations are settled using Fedwire®. All deliveries are made against full payment.

C. *Auction Takedown Service*

GSD’s Auction Takedown service enables Members to have their Treasury auction awards netted and guaranteed with the rest of their GSD-eligible trading activity in the secondary markets, thereby reducing settlement risk and costs for Members’ auction purchases. All auction awards are submitted to GSD by the Federal Reserve Banks[3] on a locked-in basis, meaning that GSD automatically generates trade confirmations based on information supplied by the Federal Reserve Banks.

D. *Repurchase Agreement Netting Services*

Repos are financial instruments that enable firms to sell securities to obtain immediate funds for their own accounts, or for the benefit of their clients, and to simultaneously agree to repurchase the same (or similar) securities after a specified time at a given price, including interest calculated using a rate agreed upon at the time of execution. Repos can be executed directly between dealers, or on a blind-brokered basis through inter-dealer brokers. In dealer-to-dealer processing, dealers trade directly with one another. In blind brokering, repos are executed using inter-dealer brokers to ensure dealer anonymity. GSD provides automated matching, netting, settlement and risk management of repo transactions.

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[1] Because FICC is not a depository institution, it is not given direct access to the Fedwire® and therefore employs the services BNY and JPM for this purpose. Prior to an entity activating its membership, GSD informs the Member of the clearing bank(s) that GSD will use to deliver eligible securities to Members and receive eligible securities from Members. Each Member must also notify GSD of the clearing bank(s) that the Member has designated to act on its behalf in the delivery of securities to GSD and the receipt of securities from GSD. Additionally, in GSD, with respect to the GCF Repo® service, there are two clearing banks—BNY and JPM—that are agents for the settlement of GCF Repos®. GSD uses BNY and JPM, and GSD Members are required to select either or both of these banks with respect to the exchange of cash and collateral between cash lenders and repo dealers. The Clearing Banks also value and allocate the collateral supporting the repos. As agents, the Clearing Banks do not require a membership category in FICC.

[2] The report includes the type of obligation (i.e., deliver or receive), name and reference number of the clearing bank, CUSIP number, settlement date, par value, final dollar value and other information descriptive of an eligible netting security.

[3] Because market activity is concentrated in New York, the FRBNY, as fiscal agent for the U.S. Treasury, coordinates much of the auction activity for the primary dealers that are required to take part in the auctions of U.S. Treasury securities. Currently, all Auction Takedown awards received by GSD on behalf of Members are received from the FRBNY, although auction activity may be processed through other Federal Reserve Banks.

GSD also provides a service known as the GCF Repo® service, which enables dealers to trade general collateral repos[4] based on rate, term and underlying product, throughout the day with inter-dealer broker Members ("brokers") on a blind basis. The service helps foster a highly liquid market for short-term financing.

Brokers (who are also members of GSD) are required to enter data on GCF Repo® transactions for submission to GSD shortly after trade execution. Because the specific collateral is not known at the point of trade, brokers submit all GCF Repos® to GSD using generic general collateral CUSIPs[5] that denote the underlying product. GCF Repo® participants can trade in generic CUSIP numbers all day and then, after the netting process at the end of the day, allocate specific securities[6] to their net settlement obligations. GSD becomes the CCP for settlement purposes to each dealer party to a GCF Repo® transaction and guarantees settlement of GCF Repos® upon receipt of trade data.

GCF Repo® transactions are settled on a tri-party basis[7], which requires dealer Members to have an account with either one or both of the participating clearing banks, BNY and JPM. Dealer Members of the GCF Repo® service are permitted to engage in GCF Repo® trading on an *inter*-clearing bank basis, meaning that dealers using different clearing banks (i.e., one dealer clears at BNY and the other dealer clears at JPM) are able to enter into GCF Repo® transactions (on a blind basis). Because the net GCF Repo® settlement obligations are established after the close of the securities Fedwire®, FICC and its two clearing banks have established a tri-party-like settlement mechanism to permit a movement of the securities after the securities Fedwire® has closed. Specifically, the two clearing banks have agreed to allow the securities to be held under a subcustodial relationship (where FICC is the subcustodian) in lieu of receiving the securities via Fedwire®. The movement of the funds to the clearing bank of the net funds borrowers does not raise the same issue because the funds Fedwire® stays open later.

During the next day, the GCF Repo® pledges are unwound. This means that the securities are returned to the net funds borrowers and the funds are returned to the net funds lenders. The clearing bank (assume it is BNY for illustrative purposes) that is returning the funds to the net funds lenders permits FICC to run a debit in the FICC account at BNY. The net funds borrowers pledge their net free equity[8] at JPM to FICC; FICC, in turn, pledges this interest to BNY (the clearing bank that has permitted the debit). The debit in the FICC account at BNY gets satisfied during the end-of-day GCF settlement process. Specifically, that day's new activity will yield a new interbank funds amount that will move at end of day—this amount is netted with the amount that would have been due in the morning. The holds against the dealers' net free equity accounts are released when the interbank funds movement is made at end of day.

In 2011, FICC made changes to the GCF Repo® service in the form of a one-year pilot program in order to comply with the recommendations made by the Task Force on Triparty Reform ("TPR"), an industry

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[4] A general collateral repo is a repo in which the underlying securities collateral is nonspecific general collateral within an identified basket of eligible collateral. This is in contrast to a specific collateral repo where the underlying securities are specifically identified.

[5] Standardized generic CUSIP numbers established for GCF Repo® processing are used to specify the acceptable type of underlying eligible collateral.

[6] The generic general collateral CUSIP defines the appropriate collateral that a dealer may use to satisfy the net settlement obligation in that CUSIP.

[7] A tri-party repo is one where a custodian bank acts as an intermediary between the two parties to the repo.

[8] A dealer's net free equity consists of the dealer's balances at the clearing bank, and it encompasses the methodology that the clearing banks use to determine whether an account holder, such as a dealer, has sufficient collateral to enter a specific transaction. The net free equity methodology allows a clearing bank to place a limit on its customers' activity by calculating a value on the customers' balances at the bank.

group formed and sponsored by the Federal Reserve Bank of New York ("FRBNY"). This program was extended for an additional year in 2012, 2013 and then again in 2014.[9] These changes better align the GCF Repo® service with the TPR recommended changes for the overall triparty market. Among other things, these changes include the following: (a) the move of the cut-off of GCF Repo® submissions from 3:35 p.m. to 3:00 p.m., (b) the move of the cut-off time for dealer affirmation or disaffirmation from 3:45 p.m. to 3:00 p.m. and (c) with respect to interbank GCF Repo® transactions, permitting cash and/or securities in the substitution process.

E. Cross-Margining with Chicago Mercantile Exchange

FICC has established a cross-margining arrangement with the Chicago Mercantile Exchange (the "CME")." In this arrangement, GSD and the CME each holds and manages its own positions and collateral, and independently determines the amount of margin that it will make available for cross-margining, referred to as the "residual margin amount" that remains after FICC and the CME conduct their own internal offset. FICC then computes the amount by which the cross-margining participant's margin requirement can be reduced at each clearing organization—i.e., the "cross-margining reduction"—by comparing the participant's positions and the related margin requirements at FICC as against those at the CME. FICC offsets each cross-margining participant's residual margin amount (based on related positions) at FICC against the offsetting residual margin amounts of the participant (or its affiliate) at the CME. FICC and the CME may then reduce the amount of collateral that they collect to reflect the offsets between the cross-margining participant's positions at FICC and its (or its affiliate's) positions at the CME.

F. Risk Management

Risk management is the foundation for GSD's ability to guarantee settlement, as well as the means by which it protects itself and its Members from the risks inherent in the settlement process. Procedures are in place to ensure that Members comply with GSD's Rules. GSD maintains strict membership standards, including minimum financial requirements, and Members are subject to ongoing review following admission. GSD's Clearing Fund addresses potential Member exposure through a number of risk-based component charges (as margin) calculated and assessed daily. In addition, GSD maintains liquidity resources that include the following: (1) the cash portion of the Clearing Fund; (2) the cash that would be obtained by entering into repos using the securities portion of the Clearing Fund (U.S. Government Treasury securities, Agency securities guaranteed by the U.S. Government and certain U.S. Agency/Government Sponsored Enterprise pass-through securities) and (3) the cash that would be obtained by entering into repos using the securities underlying transactions that would have been delivered to the defaulting Member had it not defaulted. GSD's liquidity resources are described more extensively in the discussion of Liquidity Risk under Principle 7 of this Disclosure Framework.

In addition, if GSD incurred a loss in the liquidation of a Member that was not covered by the Member's Clearing Fund deposit, there is the possibility that GSD would receive funds to cover such loss (or part of the loss) from its cross-margining and cross-guaranty arrangements.

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[9] The 2011 pilot program is described in rule filing SR-FICC-2011-05 (Securities Exchange Act Release No. 34-65213 (August 29, 2011), 76 FR 54824 (September 2, 2011)); the 2012 pilot program is described in rule filing SR-FICC-2012-05 (Securities Exchange Release No. 34-67621 (August 8, 2012), 77 FR 48572-01 (August 14, 2012)); the 2013 pilot program is described in rule filing SR-FICC-2013-06 (Securities Exchange Act Release No. 34-69774 (June 17, 2013), 78 FR 47453 (August 5, 2013)); and the 2014 pilot program is described in rule filing SR-FICC-2014-02 (Securities Exchange Release No. 34-72457 (June 24, 2014), 79 FR 36856 (June 30, 2014)). Each of the rule filings can be found on FICC's website at www.dtcc.com.

The Clearing Fund (which, in the aggregate, also operates as GSD's default fund) provides the collateralization required to cover a Member's exposure. The Clearing Fund consists of deposits posted by Members in the form of cash and eligible securities. GSD's key risk management practices and procedures, including its process for closing out the open positions of a defaulting Member and allocating any consequent losses, are discussed in more detail under Principles 3 through 7 and Principle 13. To date, including through the 2008 and 2011 well-publicized broker-dealer closeouts, FICC has never invoked its participant loss allocation procedures.

G. Additional Services

In addition to the core services described above, GSD offers a comparison-only service that is not guaranteed by GSD and for which it does not act as a central counterparty.

II. Mortgage-Backed Securities Division

MBSD processes (1) to-be-announced ("TBA") transactions, which are trades for which the actual identities of and/or the number of pools underlying each trade are not agreed to at the time of trade execution and (2) specified pool trades, which are trades for which all pool data is agreed upon by the Members at the time of execution. TBA transactions are comprised of (i) settlement balance order destined trades ("SBOD trades"), (ii) trade-for-trade destined trades and (iii) TBA options trades.

MBSD's processing of these eligible transactions, which are pass-through mortgage-backed securities issued by Government National Mortgage Association ("Ginnie Mae"), Federal National Mortgage Association ("Fannie Mae") and Federal Home Loan Mortgage Corporation ("Freddie Mac"), consists of the following steps: trade matching, TBA Netting, electronic pool notification allocation, pool comparison, Pool Netting and settlement.

MBSD's trade comparison and TBA Netting systems form the basis of all of its other services. All compared trades will be risk managed by MBSD, but the remainder of their life cycle differs according to their trade type as noted below:

- Compared SBOD trades proceed to MBSD's TBA Netting process, which is described in a subsequent section.

- Compared trade-for-trade destined trades are not eligible for TBA Netting, but pools must be allocated before they can be settled, and those pools are eligible for MBSD's Pool Netting process.

- Compared specified pool trades are neither eligible for TBA Netting nor for Pool Netting. These trades settle bilaterally between Members outside of FICC.

- Compared option trades are not eligible for any netting process. Members also cannot allocate pools against option trades. Option trades must be bilaterally cancelled by both the buyer and the seller when the underlying TBA option is exercised or when it expires.[10]

[10] MBSD does not generate any trade or settlement instructions upon exercise; if appropriate, Members must submit TBA trade instructions separately in accordance with the terms of the exercised option.

A. Trade Comparison/Real-Time Trade Matching

Similar to GSD, the crux of MBSD's trade comparison system is its RTTM® service, which is described in Section I. A. above. Through this service, MBSD Members automate the submission and matching of their TBA trades and specified pool trades throughout the trading day.

As with GSD, a trade is deemed compared by MBSD at the point in time at which MBSD makes available to the Members on both sides of a transaction output (i.e., a report) indicating that their trade data have been compared. MBSD guarantees trade settlement at the point of comparison regardless of whether the trade is novated and settled versus FICC or novated and settled bilaterally between MBSD Members.

Once trade-for-trade destined transactions and specified pool trades are matched by MBSD, settlement obligations are established between the counterparties as these trades do not enter the TBA Netting process. SBOD trades proceed to the TBA Netting process after they are matched. TBA Options are canceled by both Members at the time the underlying option is exercised or reaches its expiration date.

B. TBA Netting

MBSD performs the TBA Netting process four times per month, corresponding to each of the four primary settlement classes and dates established by Securities Industry Financial Markets Association ("SIFMA").[11]

Three business days prior to the SIFMA established settlement date (referred to as "72 Hour Day"), TBA Netting for the applicable class occurs. On this date, all compared SBOD trades within the class that has been designated for the TBA Netting process are netted within and across counterparties. The net positions created by the TBA Netting process are referred to as the settlement balance order position ("SBO position"), which constitutes settlement obligations against which Members will submit pool information ("Pool Instructs") for the Pool Netting process, which is described in further detail below.

As noted above, trade-for-trade destined transactions are not netted at the TBA level, but like the SBOD positions do constitute TBA settlement obligations against which Pool Instructs may be submitted. Specified pool trades are also not netted at the TBA level, nor do such trades enter the Pool Netting.

C. Electronic Pool Notification Allocation

Electronic Pool Notification ("EPN") enables users to reduce risk and streamline their operations by providing an automated way for Members who have an obligation to deliver pools ("pool sellers") to transmit pool information efficiently and reliably to their counterparties ("pool buyers") in real time.

Two business days prior to the established settlement date of the TBA settlement obligations (known as "48 Hour Day"), pool allocations occur. On the 48 Hour Day, pool sellers must notify their pool buyers through the EPN system of the specific pools that such sellers intend to allocate in satisfaction of their SBOD positions and/or trade-for-trade destined transactions. Pool allocations occur for all TBA obligations, whether established on 72 Hour Day via the TBA Netting process or established upon comparison when the TBA trade-for-trade destined activity was submitted.

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[11] SIFMA publishes a calendar that specifies one settlement date per month for four different product classes (known as Classes A, B, C and D) that are used to categorize the various types of TBA securities. These product classes and the associated settlement dates are recognized by the industry, and they provide the foundation for MBSD's TBA Netting process.

Pool allocations are not performed for specified pool trades because, as noted above, the pool that is to be delivered in connection with such trade is specified upon submission.

D. Pool Comparison

On 48 Hour Day, Members are also required to submit Pool Instructs via the RTTM® system for pool comparison, which is a prerequisite for P®Pool Netting. As with EPN allocation, Pool Instructs are to be submitted against all TBA obligations, whether stemming from the TBA Netting process or established upon comparison when the TBA trade-for-trade destined activity was submitted.

Pool data information on Pool Instructs must be bilaterally compared (i.e., the mandatory comparison pool data submitted by the seller must match the mandatory comparison pool data submitted by the buyer) in order for the Pool Instructs to be eligible for consideration for Pool Netting. Pool Instructs must further be "assigned" by MBSD to a valid open TBA position, meaning that the trade terms submitted on the Pool Instruct must match the trade terms of a TBA CUSIP that has a sufficient open position. Only compared and assigned Pool Instructs are evaluated for inclusion in Pool Netting.

E. Pool Netting

MBSD's Pool Netting process reduces the number of pool settlements by netting Pool Instructs stemming from TBA Netting Process and trade-for-trade destined activity to arrive at a single net position in a particular pool number for next-day delivery date. Although Pool Netting runs daily, the majority of Pool Netting activity follows the SIFMA calendar.

MBSD's system will determine which pools will receive maximum benefit from Pool Netting by considering such factors as trading velocity and projected netting factor. In order to encompass only the most actively traded pools with significant netting potential, MBSD has established the following eligibility criteria: 1) the total par (current face) of all Pool Instructs across all Members in a given pool must meet a minimum (configurable) requirement and 2) the percentage of sides that would be eliminated via netting must meet a minimum (configurable) requirement. MBSD believes that this approach avoids the imposition of additional settlement costs on Members for thinly traded pools.

At the start of each netting cycle, all Pool Instructs active in the system are evaluated for potential inclusion in Pool Netting.[12] Any Pool Instruct not included in the selection process for Pool Netting, such as uncompared Pool Instructs or Pool Instructs in pending status (pending status occurs if a Member submits a pool number that FICC does not have complete information on or if FICC deems that the pool number should not be netting eligible), will be purged from the system. These transactions must be settled directly between allocation counterparties outside of FICC. Pool Instructs in a customer delivery request ("CDR") state are precluded from operational netting; however, the current face of all long CDR Pool Instructs are totaled to establish an aggregated long CDR amount, and the current face of all short CDR Pool Instructs are totaled to establish an aggregated short CDR amount.

All Pool Instructs selected for Pool Netting will be aggregated to arrive at a single net position in each pool number that the Member must either deliver or receive. Upon FICC's issuance of Pool Netting results to Members, "novation" occurs, i.e., TBA settlement obligations between the parties are cancelled and replaced with obligations to settle with FICC.

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[12] In order to be included in this selection process, Pool Instructs must have (i) the same contractual settlement date, (ii) a delivery date equal to the next business date, (iii) been compared and (iv) been correlated and assigned to a TBA position when pool netting commences (i.e., have been "assigned").

F. *Settlement*

(i) Settlement with FICC as Counterparty

Similar to GSD, MBSD employs the settlement services of BNY and JPM. Prior to an entity activating its membership, MBSD informs the Member of the clearing bank(s) that MBSD will use to deliver eligible securities to Members and to receive eligible securities from Members. Each Member also informs MBSD of the clearing bank(s) that the Member has designated to act on its behalf in the delivery of securities to MBSD and in the receipt of securities from MBSD.

On each business day, MBSD makes available to each Member output (i.e., a report) that provides information that MBSD deems sufficient to enable such Member to be able to settle its net settlement positions on that business day. Each Member, based on the information provided by MBSD, then provides appropriate instructions to its clearing bank to deliver to MBSD, and/or to receive from MBSD, on behalf of the Member, eligible netting securities against payment or receipt at the appropriate settlement value.

Obligations may be settled within a clearing bank—i.e., on the books of a clearing bank—when the deliver and attendant receive obligation are at the same clearing bank. Otherwise, obligations are settled using Fedwire®. All deliveries are made against full payment.

(ii) Settlement outside of FICC

Unlike GSD, certain obligations among MBSD members settle outside of FICC. These obligations include (1) Pool Instructs that are not included in Pool Netting (either because they are ineligible or because they do not meet selection criteria for inclusion in the net) and (2) specified pool trades, which are not eligible for Pool Netting. As a result, Members are required to settle such transactions bilaterally with applicable settlement counterparties outside of FICC. Members must report that an obligation has settled outside FICC by submitting a Notification of Settlement ("NOS") to MBSD for pool settlements relating to all trade types, with the exception of option trades. This is required because MBSD will not know which pools have actually settled directly between its Members unless it receives a separate notification. NOS are subject to bilateral matching by RTTM®. Once the mandatory details on the NOS submitted by both Members are compared, the associated obligation is deemed to have settled and will therefore no longer be subject to MBSD's risk management calculations.

G. *Risk Management*

Risk management is the foundation for MBSD's ability to guarantee settlement, as well as the means by which it protects itself and its Members from the risks inherent in the settlement process. Procedures are in place to ensure that Members comply with MBSD's Rules. MBSD maintains strict membership standards, including minimum financial requirements, and Members are subject to ongoing review following admission. MBSD's Clearing Fund addresses potential Member exposure through a number of risk-based component charges (as margin) calculated and assessed daily. The liquidity resources of the FICC include the following: (1) the cash portion of the Clearing Fund; (2) the cash that would be obtained by entering into repos using the securities portion of the Clearing Fund (U.S. Government Treasury securities, Agency securities guaranteed by the U.S. Government and certain U.S. Agency/Government Sponsored Enterprise pass-through securities) and (3) the cash that would be obtained by entering into repos using the securities underlying transactions that would have been delivered to the defaulting Member had it not defaulted. MBSD also maintains the Capped Contingency Liquidity Facility ("CCLF®"), which is a supplemental liquidity contingency option. MBSD's liquidity resources are described more extensively in the discussion of Liquidity Risk under Principle 7 of this Disclosure Framework.

In addition, if MBSD incurred a loss in the liquidation of a Member that was not covered by the Member's Clearing Fund deposit, there is the possibility that MBSD would receive funds to cover such loss (or part of the loss) from its cross-guaranty arrangement. The Clearing Fund (which, in the aggregate, also operates as MBSD's default fund) provides the collateralization required to cover a Member's exposure. The Clearing Fund consists of deposits posted by Members in the form of cash and eligible securities. MSBD's key risk management practices and procedures, including its process for closing out the open positions of a defaulting Member and allocating any consequent losses, are discussed in more detail under Principles 3 through 7 and Principle 13. To date, including through the 2008 and 2011 well-publicized broker-dealer closeouts, FICC has never invoked its Member loss allocation procedures.

H. Additional Services

In addition to the core services described above, MBSD offers an EPN-only service that is not guaranteed by MBSD and for which it does not act as a central counterparty.[13]

[13] MBSD Members are required to be EPN Members; however, one can be an EPN Member only and not a full-service Member with access to MBSD's guaranteed central counterparty services. The EPN services are described in the EPN Rules, which are available at www.dtcc.com.

Appendix C - DTC

Key Services: System Design and Operation

The following is a brief description of the core services and functions performed by DTC.

DTC is the world's largest securities depository and a clearing agency for the settlement of securities trading activity. DTC maintains securities and settlement accounts for its members, generally banks, broker-dealers and other financial institutions, including linked FMIs. (*See* Principle 18 (Access and participation requirements), Principle 20 (FMI links).)[1]

Immobilization and book-entry transfer services

DTC holds eligible securities on behalf of Participants and reflects the transfer of interests in those securities among Participants by computerized book-entry. Eligible securities deposited with DTC for book-entry transfer services are registered in the name of its nominee, Cede & Co. ("Cede"), a New York partnership. When the certificates are registered in the name of Cede & Co., DTC acquires legal title to the securities; as to Participants of DTC to whose account the securities may be credited, interests in the securities become fungible. That is, a Participant does not have a right to any particular security certificate, each Participant has a proportionate interest in the total inventory of the issue held by DTC.

As the holder of immobilized securities through Cede, under DTC Rules and applicable law, DTC provides asset services that facilitate centralization, simplification and automation in the processing of principal and income payments and corporate actions. These include Deposit, Custody, Direct Registration, Dividends[2], Reorganization and Proxy Services, further described in applicable service guides at the DTCC website.[3]

There are two fundamental types of book-entry transfer under the DTC Rules: delivery and pledge. A Participant may instruct DTC to deliver securities from its account to the account of another Participant, in which case ownership of the securities is transferred. Alternatively, a Participant (the "Pledgor") may instruct DTC to pledge securities from its account to the pledgee account of a counterparty (the "Pledgee"), in which case a collateral interest is transferred. The Pledgor continues to own the securities, subject to the pledge, and the Pledgee may release the pledged securities back to the Pledgor in the ordinary course. However, DTC Rules also allow the Pledgee to take control of the collateral and assume ownership, or transfer the securities to other Participants, without the further consent of the Pledgor.[4]

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[1] As described in Principle 18 (Access and participation requirements), under the DTC Rules, there are three classes of membership: Participants, Limited Participants and Pledgees. In this Disclosure Framework, the term "Participants" generally includes all three, unless the context indicates otherwise.

[2] Pursuant to DTC Rule Filing SR-DTC-2014-12 (December 4, 2014) published by the SEC in a notice dated December 17, 2014 (Release No. 34-73864), the "Dividends Service Guide" will be renamed and otherwise amended as the "Distributions Service Guide," and the changes provided in the Rule Filing will be implemented in the first quarter of 2015.

[3] DTC also provides Global Tax Services to facilitate Participant compliance with tax obligations, including international tax regulations, tax treaty provisions and withholding tax reporting requirements, including Domestic Tax Reporting, U.S. Tax Withholding, Tax Relief and Tax Info Services.

[4] The characterization of any collateral transaction depends on agreements made outside of DTC between the Participant and the counterparty. DTC does not inquire into the terms and conditions of these agreements but affords its Participants the means to deliver ownership or a collateral interest on DTC books and records, and to perfect a security interest through such a delivery, subject to the DTC Rules and applicable law. A variant for repurchase transactions is also available under the Rules, subject to the outside agreement(s) of the parties.

A DTC book-entry transfer may be a delivery free of payment or a delivery versus payment ("DVP"), for settlement through DTC end-of-day net funds settlement, as further described in responses to Principle 8 (Settlement finality) and Principle 9 (Money settlements). [5] Risk management controls apply intraday to protect DTC and its Participants against the failure of a Participant to settle.

Under the DTC Rules, DTC offers a variety of core services based on these fundamental book-entry mechanics.

The Underwriting Service, for instance, is the process by which securities may be credited to the account of an underwriting Participant at issuance and distributed to investing Participants by DVP for settlement at DTC. DTC also processes book-entry transfers for institutional trades of its Participants, affirmed and matched by its affiliate, Omgeo LLC.

A key industry service provided through the DTC delivery system is the issuance and maturity presentment of MMIs.[6] Approximately 99% of all U.S. commercial paper is distributed and settled through DTC. DTC provides Participants and Issuing/Paying Agents ("IPAs") with an automated book-entry system for settling issuances and maturity presentments of MMIs. The Issuing Agent (which must be a Participant) sends issuance instructions to DTC electronically to deposit, upon issue, the specified MMI securities to its account. The newly issued MMI securities are then distributed from the Issuing Agent's account, by DVP transfer to the accounts of purchasing Participants. Maturity presentments are also made by book-entry transfer; on the maturity date of an issue, securities held by Participants are automatically transferred DVP to the IPA's account, for payment through net settlement.

Another important use of DTC book-entry transfer is the interface of DTC with its affiliate NSCC for the processing of trades that are cleared and settled in the NSCC Continuous Net Settlement ("CNS") system. As more fully described in the response to Principle 20 (FMI links), securities cleared through CNS are settled by book-entry delivery, free of payment, to and from DTC accounts of NSCC members that are also DTC Participants ("Common Members").

Supporting cross-border immobilization and book-entry transfer, DTC has a two-way link with CDS Clearing and Depository Services, Inc. ("CDS"). CDS, as a Participant at DTC, holds securities at DTC, which may be transferred on the books of DTC on behalf of CDS participants. Conversely, DTC holds securities in its account at CDS and participates in CDS settlement, in Canadian dollars, on behalf of DTC Participants. DTC also maintains links with other CSDs, as further described in response to Principle 20 (FMI links).

Risk Management Controls

DVP transfers at DTC are structured so that the completion of delivery to a Participant is contingent on the receiving Participant satisfying its end-of-day net settlement obligation, if any. Intraday, the risk of default is managed through controls, structured so that DTC may complete settlement despite the failure to settle of the Participant, or affiliated family of Participants, with the largest settlement obligation. The two principal controls are the net debit cap and collateral monitor, discussed in response to Principle 4 (Credit risk), Principle 5 (Collateral) and Principle 7 (Liquidity risk). The largest settlement obligation of a Participant or affiliated family of Participants cannot exceed DTC liquidity resources, based on the net

[5] Pledges may also be made free of payment or versus payment.

[6] Securities eligible for DTC's MMI services include: municipal notes with a maturity of one year or less; municipal bonds issued with demand options; zero coupon bonds backed by U.S. Government securities; collateralized mortgage obligations and other asset-backed securities; auction-rate and tender-rate preferred stocks and notes; medium term notes; commercial paper; institutional certificates of deposit; and bankers acceptances.

debit cap, and must be fully collateralized, based on the collateral monitor. This structure is designed so that DTC may pledge or liquidate collateral of the defaulting Participant in order to complete settlement. Liquidity resources, including the Participants Fund and a committed line of credit with a consortium of lenders, are available to complete settlement if there is a Participant default.

Money Settlement at DTC

In addition to a securities account at DTC, each Participant has a settlement account to record any net funds obligation for end-of-day settlement, whether payment will be due to or from the Participant. DTC's delivery and settlement system is a modified DVP Model 2, deferred net settlement ("DNS") system.[7]

During the day, debits and credits are entered into the Participant's settlement account. The debits and credits arise from DVP transfers and from other funds events or transactions, such as principal and interest payments distributed to a Participant or intraday settlement progress payments by a Participant to DTC. Debits and credits in the Participant's settlement account are netted intraday to calculate, at any time, a net debit balance or net credit balance, resulting in an end-of-day settlement obligation or right to receive payment. DTC nets debit and credit balances for Common Members with NSCC, to reduce funds transfers for settlement, and acts as settlement agent for NSCC in this process. Further netting occurs through the use of Settling Banks for all Participants. Settlement payments to and from DTC and these Settling Banks are made through the National Settlement System of the FRS ("NSS"), as further described in responses to Principle 1 (Legal basis) and Principle 9 (Money settlements).

Liquidity Resources for Settlement

DTC maintains a cash Participants Fund, with an approximate value of $1.8 BN as of June 30, 2014, including $1.15 BN, the aggregate amount of required deposits, and excess deposits of $650 MM. The required deposit for any Participant (a "Required Deposit") is based on the liquidity risk it poses to DTC, measured by its average net debit peak over a rolling 60 business day period. The aggregate amount of the Participants Fund is determined based on the amount that would be needed to complete net settlement if a Participant failed to settle. If a Participant defaults, its deposit to the Participants Fund is available to DTC to complete system-wide settlement.

DTC additionally maintains a committed line of credit with a consortium of lenders, for $1.9 BN. Any borrowing under the line must be secured by collateral of the defaulting Participant. (*See* response to Principle 5 (Collateral)).

The committed line of credit and the aggregate Participants Fund, together, provide liquidity resources sufficient to complete settlement among non-defaulting Participants, if the Participant or affiliated family of Participants with the largest settlement obligation defaults. These liquidity resources are further discussed in response to Principle 7 (Liquidity risk).

The Participants Fund is also a resource for losses arising out of a Participant default. Such a loss could be charged to the Participants Fund deposits of non-defaulting Participants ratably in accordance with their Required Deposits. (*See* response to Principle 13 (Participant-default rules and procedures).)

[7] "A Glossary of Terms Used in Payments and Settlement Systems" (March 2003), Bank for International Settlements – Committee on Payment and Settlement Systems, p. 22.