United States Government Accountability Office
Washington, DC 20548

February 26, 2009

The Honorable Carl Levin
Chairman
Permanent Subcommittee on Investigations
Committee on Homeland Security
and Governmental Affairs
United States Senate

The Honorable Charles Grassley
Ranking Member
Committee on Finance
United States Senate

Subject: *Securities and Exchange Commission: Oversight of U.S. Equities Market Clearing Agencies*

An effective clearance and settlement process is vital to the functioning of equities markets. When investors agree to trade an equity security, the purchaser promises to deliver cash to the seller and the seller promises to deliver the security to the purchaser. The process by which the seller receives payment and the buyer, the securities, is known as clearance and settlement. In the United States equities market, a centralized clearance and settlement system was established to reduce risks and increase efficiency in the market. As part of this system, trades in equities and other securities are typically cleared and settled through clearing agencies—self-regulatory organizations (SRO) that are required to register with and are subject to oversight by the Securities and Exchange Commission (SEC). Virtually all equities securities trades in the United States are cleared and settled through the National Securities Clearing Corporation (NSCC) and the Depository Trust Company (DTC), clearing agency subsidiaries of the Depository Trust and Clearing Corporation (DTCC). According to DTCC, 99.9 percent of daily transactions by dollar value clear and settle within the standard 3-day settlement period. In the remaining transactions, the seller failed to deliver the securities on time, resulting in a fails to deliver (FTD). On December 31, 2007, the value of aggregated FTDs was $7.5 billion.

According to SEC, many FTDs are caused by processing delays or mechanical errors, and are typically resolved within a few days. FTD can also result from naked short selling. While not defined in the federal securities laws or SRO rules, according to SEC, naked short selling generally refers to selling short without having borrowed the securities to make delivery; potentially resulting in a FTD.[1] When FTDs persist for days or months, they can accumulate

---

[1]A short sale is the sale of a security that the seller does not own or any sale that is consummated by the delivery of a security borrowed by, or for the account of, the seller. In general, short selling is used to profit from an expected downward price movement, to provide liquidity in response to unanticipated demand, or to hedge the risk of a long position in the same or related security.

to a level that may affect the market for that security. In recent years, investors, publicly traded companies, and others have expressed concerns regarding the intentional failures to deliver by some investors. For example, FTDs may be indicative of an illegal trading strategy known as manipulative naked short selling, in which short sellers attempt to profit by using naked short selling to inundate the market with sales of a security and manipulate its price downward. FTDs may also deprive shareholders of the benefits of ownership, such as voting and lending.

SEC has taken several actions, in recent years, that were intended to address FTD and the potential for manipulative naked short selling. In August 2004, SEC adopted Regulation SHO, which intended to address large and persistent FTDs and curb the potential for manipulative naked short selling by requiring clearing agency participants (participants) to close out FTD positions lasting 13 consecutive settlement days in certain equity securities.[2] In July 2008, concerned that false rumors may have fueled market volatility in financial institutions of significance, SEC temporarily restricted naked short selling in 19 financial stocks by issuing an emergency order requiring short sellers to pre-borrow securities before effecting short sales in these stocks and deliver the securities by settlement date, with limited exceptions. In September 2008, SEC took further action to try to curb potential manipulative naked short selling and to address volatile markets by issuing an emergency order requiring participants with FTD on the third settlement day after trade date, in any equity security, to take action to close out their position on the following morning, with limited exceptions. SEC extended this requirement in the form of an interim final temporary rule in October 2008.

To facilitate and monitor industry compliance with these rules and emergency orders, NSCC electronically submits FTD data daily to SEC and the stock exchanges. Because the prompt and accurate settlement of trades is essential to the smooth functioning of the United States' equities markets, you asked us to provide a background briefing on: (1) NSCC and DTC processes for clearing and settling equities trades, including their process for identifying and addressing FTD; and (2) SEC's efforts to ensure the reliability and efficiency of the clearance and settlement system through its examination program for clearing agencies.[3]

On January 30, 2009, we briefed the committees' staffs on the results of this work. This letter summarizes the briefing. Enclosure I contains the full briefing. In response to questions asked during the briefing, we have added information to the enclosed briefing slides to clarify the acronyms used in these slides.

To describe NSCC and DTC processes for clearing and settling equities trades, including their process for identifying and addressing FTD, we reviewed NSCC and DTC rules and procedures, annual reports, press releases, a 2005 examination conducted by SEC's Office of Compliance Inspections and Examinations (OCIE), and a 2006 amicus brief filed by SEC on behalf of DTCC in the Supreme Court of Nevada. We also interviewed DTCC officials. To describe SEC's efforts to ensure the reliability and efficiency of the clearance and settlement system through its examination program for clearing agencies, we reviewed the 2007 Clearing

---

[2]These securities are termed threshold securities. A threshold security is an equity security where, for 5 consecutive settlement days, (1) there are aggregate FTD at a registered clearing agency of 10,000 shares or more, (2) the level of FTD is equal to at least one-half of one percent of the issuer's total shares or more, and (3) the security is included on a list published by the SROs.

[3]At your request, we are also assessing SEC's Regulation SHO and other recent regulatory actions that SEC intended to address FTD and manipulative naked short selling. As agreed with your staffs, we will report our findings with respect to this work in April 2009.

Agency Examination Guidance issued by OCIE and compared it to inspection community best practices; including GAO's Yellow Book, federal banking regulators' examination guidance, and Inspectors General Examination Standards.[4] We also reviewed 13 of 28 clearing agency examinations completed between August 7, 2000, and September 30, 2008, to assess OCIE's compliance with the routine examination schedule set forth in the guidance and its procedures for recommendation tracking. We chose to review 11 examinations completed during this time frame, based on the clearing agency's involvement in the clearance and settlement of equity securities transactions, and 2 additional examinations that OCIE completed after issuing the 2007 guidance. We did not, however, evaluate the scope, methodology, findings, or recommendations related to the 13 examinations. We also reviewed training materials OCIE provides to its clearing agency examiners and interviewed OCIE officials and clearing agency examiners.

We conducted our work from February 2008 to February 2009, in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions.

Background

There are two types of clearing agencies: clearing corporations and depositories. Clearing corporations provide several essential services to the market, including comparing and confirming trade data submitted by participants (or reporting to participants the results of trade comparisons submitted by the exchanges), acting as the common counterparty and guaranteeing the completion of the trade if either side defaults or goes out of business, and preparing instructions for their participants regarding their settlement obligations.

Depositories also provide multiple services to the market by retaining custody of equity and debt securities issues and maintaining ownership records. Specifically, depositories effect deliveries of securities between participants via a book entry system that transfers ownership of securities electronically, thus eliminating the need for the physical movement of securities. Depositories receive instructions from the clearing corporation to deliver and receive securities on behalf of its participants, or from participants themselves, to move securities from one participant's account to another. Depositories also communicate with settling banks—banks that transfer money to and from DTC and NSCC on behalf of customers—to net settle any financial obligations.

The Securities and Exchange Act of 1934 (Exchange Act) established the regulatory framework for clearing agencies.[5] Section 17A established a system of SEC registration for clearing agencies and includes general criteria that clearing agencies must satisfy in order to be registered. Section 19 established clearing agencies as SROs, as well as provided a

---

[4]GAO, *Government Auditing Standards*, GAO-07-731G (Washington, D.C.: July 2007 Revision); Office of the Comptroller of the Currency, *Examination Planning and Control*, *Comptroller's Handbook*, (Washington, D.C., July 1997); Federal Reserve System, *Framework for Risk-Focused Supervision of Large Complex Institutions*, (Washington, D.C., Aug. 8, 1997); Office of Inspector General, *Quality Standards for Inspections*, (Washington, D.C., January 2005).

[5]15 U.S.C. §§ 78q-1.

framework for SEC oversight over all SROs, including SEC review and approval of most clearing agency rules.[6]

SEC oversees clearing agencies primarily through its Division of Trading and Markets (Trading and Markets), OCIE, and the Division of Enforcement (Enforcement). Trading and Markets administers and executes the agency's programs relating to the structure and operations of the securities markets, which include regulation of clearing agencies and review of their proposed rule changes. OCIE examines clearing agencies to assess the overall safety, reliability, and efficiency of the clearing agency and its operations. It also examines clearing agencies for compliance with their own rules and applicable federal laws and regulations. Enforcement investigates and prosecutes violations of securities laws.

Summary

Trade clearance and settlement in the United States operates on a standard 3-day settlement cycle. Due to the volume and value of trading in today's markets, NSCC nets trades and payments among its participants, using its Continuous Net Settlement System. This is a book entry accounting system, whereby each NSCC participant's daily purchases and sales of securities, based on trade date, are automatically netted into one long position (right to receive) or one short position (obligation to deliver) for each securities issue purchased or sold.[7] The participant's corresponding payment obligations are, similarly, netted into one obligation to pay or one obligation to receive money.[8] For each participant with a short position on settlement date, NSCC instructs the securities depository designated by the participant—typically DTC—to deliver securities from the participant's account at the depository to the NSCC's account. NSCC then instructs the depository to deliver those securities from NSCC's account to participants with net long positions in the security.

If a participant fails to deliver the total number of securities that they owe NSCC on a particular settlement date, NSCC may be unable to meet its delivery obligations, resulting in a fails to receive (FTR) for participants who have net long positions. NSCC uses the automated Stock Borrow Program to borrow shares to meet as many of its delivery obligations as possible. This program allows participants to instruct NSCC on the specific securities from their DTC account that are available for borrowing to cover NSCC's Continuous Net Settlement System delivery shortfalls. Any shares that NSCC borrows are debited from the lending participant's DTC account, delivered to NSCC, and, subsequently, delivered to a NSCC participant with a net short position. NSCC creates a right to receive (net long) position for the lender in the Continuous Net Settlement System to show that it is owed securities. Until the securities are returned, the lending participant no longer has ownership rights in them and, therefore, cannot re-lend them. Additionally, any delivery made using the Stock Borrow Program does not relieve the participant who fails to deliver from its delivery obligation to NSCC.

OCIE oversees the clearing agency examination program and conducts both regular cycle and special examinations of clearing agencies. The largest clearing agencies (including

---

[6]15 U.S.C. §§ 78s.

[7]Continuous Net Settlement System positions do not represent ownership. Only DTC account positions represent ownership.

[8]According to NSCC, the Continuous Net Settlement System reduces the value of securities and payments that need to be exchanged by an average of 97 percent each day.

NSCC and DTC), which provide centralized clearing services, are examined every other year. The smaller clearing agencies are examined on a two- or three-year cycle, depending on resources. In addition to regular cycle examinations, OCIE conducts special examinations targeting clearing activities of more than one clearing agency.

To assist its examiners in planning and conducting examinations, OCIE has developed written guidance. OCIE revised and expanded this guidance in March 2007. The revised guidance discusses aspects of planning and conducting an examination, consistent with inspection community best practices. Specifically, the guidance provides examiners with background information related to clearing agency functions and the legal framework governing them. It also discusses examination planning, including staffing, risk-assessment, and coordination with other SEC divisions, as well as federal and state regulators; field work, including interviews, document requests, sampling and testing of parameters; the preparation of the examination reports and deficiency letters; and the review and tracking of clearing agencies' responses to examination findings and recommendations. The guidance also identifies key areas in which examiners may focus during a review. These areas are derived from the clearing agency standards contained in Section 17A of the Exchange Act and the interpretive guidance issued by Trading and Markets.

To better understand OCIE's examination procedures related to clearance and settlement, we reviewed a 2005 examination of NSCC's Continuous Net Settlement System/Stock Borrow Program. We found that OCIE incorporated a review of NSCC's role in the implementation of Regulation SHO during this examination. In particular, examiners reviewed the short position reports that are generated daily from the Continuous Net Settlement System. NSCC transmits the FTD data from these reports to the SROs, who then determine those securities that qualify as threshold securities. As part of their review, examiners performed independent testing of a sample of securities included in these reports. OCIE's review did not raise any reliability concerns with the short position reports.

In addition, in response to media criticism and allegations made by certain issuers and shareholders that NSCC and DTC were facilitating naked short selling through the operation of the Stock Borrow Program, OCIE also incorporated a review of this program into the scope of its 2005 examination. These critics argued that the Stock Borrow Program exacerbated naked short selling by creating and lending shares that are not actually deposited at DTC, thereby, flooding the market with shares that do not exist. As part of their review, OCIE examiners tested transactions in securities that were the subject of the above referenced allegations or had high levels of prolonged FTD. The examination did not find any instances where critics' claims were validated. However, we did not validate OCIE's findings.

Agency Comments and Our Evaluation

We provided a draft of the enclosed briefing to SEC and relevant portions to DTCC. We received technical comments that were incorporated, where appropriate. We also provided a draft of this correspondence to the Chairman of the SEC for her review and comment. SEC provided written comments on the draft, which we have reprinted in enclosure II. In its written comments, SEC said that OCIE takes its responsibility to provide effective oversight of the clearance and settlement system for the U.S. equities markets seriously. It also noted that an effective clearance and settlement process is vital for the functioning of the U.S. securities markets.

As agreed with your offices, unless you publicly announce its contents earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to interested congressional committees and the Chairman of the SEC. The report also will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-8678 or williamso@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs can be found on the last page of this report. Major contributors to this report were Karen Tremba, Assistant Director; Stefanie Jonkman; Matthew Keeler; Carl Ramirez; Barbara Roesmann; and Paul Thompson.

Orice M. Williams
Director, Financial Markets
and Community Investment

Enclosures

GAO
Accountability * Integrity * Reliability

Securities and Exchange Commission: Oversight of U.S. Equity Market Clearing Agencies

Briefing

The Honorable Carl Levin
Chairman, Permanent Subcommittee on Investigations
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Charles Grassley
Ranking Member, Committee on Finance
United States Senate

January 30, 2009

1

Overview

- Abbreviations
- Introduction
- Objectives
- Summary of Findings
- Scope and Methodology
- Background
- Discussion of Objectives

2

GAO
Accountability * Integrity * Reliability

Abbreviations

• CNS	Continuous Net Settlement
• DTC	Depository Trust Company
• DTCC	Depository Trust and Clearing Corporation
• FTD	Fails to Deliver
• FTR	Fails to Receive
• NSCC	National Securities Clearing Corporation
• OCIE	Office of Compliance Inspections and Examinations
• Participants	Clearing agency participants
• SBP	Stock Borrow Program
• SEC	Securities and Exchange Commission
• SRO	Self-Regulatory Organization
• T	Trade Date

3

GAO
Accountability * Integrity * Reliability

Introduction

- When investors agree to a trade, the purchaser promises to deliver cash to the seller and the seller promises to deliver the securities to the purchaser.
- In the U.S. equities markets, a centralized clearance and settlement system was established to reduce risks and increase efficiency in the market.
- Trades in equities and most other securities in the United States are typically cleared and settled through clearing agencies. Clearing agencies are self-regulatory organizations (SRO) that are required to register with and are subject to oversight by the Securities and Exchange Commission (SEC).

4

GAO
Accountability * Integrity * Reliability

Introduction

- Virtually all equities trades in the United States are cleared and settled through the Depository Trust Company (DTC) and the National Securities Clearing Corporation (NSCC), clearing agency subsidiaries of the Depository Trust and Clearing Corporation (DTCC).
- In 2007, NSCC processed 13.5 billion transactions, totaling $283 trillion.
- Average daily transactions were 54 million, totaling an average of $1.1 trillion.
- According to DTCC, 99.9 percent of daily transactions, by dollar volume, clear and settle within the standard 3-day settlement period.
    - In the remaining transactions, NSCC members did not deliver their securities on time, resulting in fails to deliver (FTD).
    - On Dec. 31 2007, the value of aggregated FTD to NSCC totaled $7.5 billion.

5

GAO
Accountability * Integrity * Reliability

Introduction

- According to SEC, many FTD are caused by mechanical error or processing delays, and typically, are resolved within a few days.
- However, FTD also can result from naked short selling. Naked short selling, while not defined in federal securities laws, generally refers to selling short without having borrowed the securities to make delivery, potentially resulting in a FTD.[1]
  - FTD that persist for days or months can accumulate to a level that could affect the market for that security.
- In recent years, investors, publicly traded companies, and others have expressed concerns about intentional FTD.
  - FTD may deprive shareholders of the benefits of ownership, such as voting and lending.
  - FTD may be indicative of an illegal trading strategy known as manipulative naked short selling, in which short sellers attempt to profit by using naked short selling to flood the market with sales of a stock and manipulate its price downward.

[1]A short sale is the sale of a security that the seller does not own or any sale that is consummated by the delivery of a security borrowed by, or for the account of, the seller. In general, short selling is used to profit from an expected downward price movement, to provide liquidity in response to unanticipated demand, or to hedge the risk of a long position in the same or related security.

6

- SEC has taken several actions in recent years to address FTD and the potential for abusive naked short selling.
  - Regulation SHO: Issued in August 2004 and subsequently amended. Among other things, the regulation requires equities markets to publish daily lists of securities with significant levels of FTD.[2]
    - Clearing agency participants (participants) with FTD in these securities lasting 13 consecutive settlement days must close out their positions.
  - July 2008 Emergency Order: SEC temporarily restricted naked short selling in 19 financial stocks by requiring short sellers to pre-borrow securities and deliver by settlement date, with limited exceptions.
  - September 2008 Emergency Order and October 2008 Interim Final Temporary Rule: SEC required participants with FTD on the third settlement day after trade date, in any equity security, to take action on the next morning to close out their position, with limited exceptions.

[2]These securities are termed "threshold securities." A threshold security is an equity security where, for five consecutive settlement days, (1) there are aggregate FTD at a registered clearing agency of 10,000 shares or more per security, (2) the level of FTD is equal to at least one-half of one percent of the issuer's total shares outstanding, and (3) the security is included on a list published by the self-regulatory organizations.

GAO
Accountability * Integrity * Reliability

Objectives

- To facilitate and monitor industry compliance with these rules and emergency orders, NSCC electronically submits FTD data daily to SEC and the stock exchanges. Because the prompt and accurate settlement of trades is essential to the smooth functioning of the U.S. equities markets, we have conducted an overview of:
  - (1) NSCC and DTC processes for clearing and settling equities trades, including their processes for identifying and addressing FTD; and
  - (2) SEC's efforts to ensure the reliability and efficiency of the clearance and settlement system through its examination program for clearing agencies.[3]

[3] At your request, we also are assessing SEC's Regulation SHO and the other recent regulatory actions with which SEC intended to address FTD and manipulative naked short selling. As agreed with your staffs, we will report our findings with respect to this work in April 2009.

8

Accountability * Integrity * Reliability

Summary of Findings: Objective 1

- NSCC nets trades and payments among its participants using its Continuous Net Settlement system (CNS).
  - Each day, for each security in which the member has transacted business, CNS tabulates the member's daily purchases and sales of the security to determine whether the member has a net obligation to deliver securities to NSCC or receive securities from NSCC.
  - NSCC members who do not deliver securities they owe NSCC in time for settlement maintain a short, or FTD position, on the books of CNS until they satisfy their delivery obligation.
- NSCC has created the Stock Borrow Program (SBP) to allow willing members to temporarily lend securities to NSCC to cover delivery shortfalls caused by other members' delivery failures. It does not alleviate the failing member's responsibility to deliver the securities they owe and only addresses a portion of open FTD. According to DTCC, by facilitating delivery of securities to the buyer, SBP generally covers between 15-20 percent of FTD each settlement cycle.

9

Summary of Findings: Objective 2

- SEC's Office of Compliance Inspections and Examinations (OCIE) recently revised written guidance for its examination program for clearing agencies discussed aspects of planning and conducting an examination consistent with inspection community best practices.
  - OCIE conducts routine examinations of clearing agencies every two to three years, depending on their size.
  - In response to concerns that NSCC and DTC were facilitating naked short selling through the operation of SBP, OCIE incorporated a review of SBP into the scope of a 2005 routine examination. OCIE also reviewed the process NSCC uses to generate the FTD reports used by SEC and SROs to facilitate and monitor compliance with Regulation SHO. OCIE found both programs to be operating as intended.
- OCIE examinations can result in findings and recommendations to the clearing agency. Twelve of the 13 examinations we reviewed contained evidence of follow-up on recommendation.

10

GAO
Accountability * Integrity * Reliability

Scope and Methodology

- Reviewed OCIE's 2007 Clearing Agency Examination Guidance (guidance) and compared it to inspection community best practices; including GAO's Yellow Book, Federal Reserve Examination Guidance, and Inspectors General Examination Standards.
- Reviewed 13 of 28 clearing agency examinations completed from August 7, 2000, through September 30, 2008, to assess OCIE's compliance with the routine examination schedule in the guidance and procedures for recommendation tracking.
  - We did not evaluate the scope, methodology, findings, or recommendations related to the 13 examinations we reviewed.
- Reviewed training materials for clearing agency examiners.
- Reviewed NSCC rules, annual reports, press releases, and a 2005 OCIE examination for information on the clearance and settlement processes at NSCC and DTC.
- Interviewed OCIE officials, clearing agency examiners, and DTCC officials.

11

GAO
Accountability * Integrity * Reliability

Scope and Methodology

- We conducted our work from February 2008 to January 2009, in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions.

12

GAO
Accountability * Integrity * Reliability

Background

- Clearing agencies are divided into two categories: clearing corporations and securities depositories.
- Clearing corporations provide several essential services.
    - Trade comparison: compares and confirms trade data. Trades can be submitted to a clearing agency by a locked-in trade source, such as an exchange, or by the two members that represent the parties to the trade. In the latter situation, the clearing corporation confirms that the data entered by the parties agree.
    - Common counterparty or trade guarantee: guarantee delivery of securities or cash if either side of a trade defaults or goes out of business.
    - Settlement: notify their members of their current securities delivery and payment obligations.

13

GAO
Accountability * Integrity * Reliability

Background

- Securities depositories also provide multiple services in the clearance and settlement of trades.
    - Custody services: retain custody of equity and debt securities issues.
    - Ownership records: provide book entry deliveries that transfer the ownership of securities electronically, eliminating the need for physical movement of securities.
        - Receive instructions from the clearing corporation to deliver and receive securities on behalf of its members.
        - Receive instructions from members to move securities from one member's account to another.
    - Communicates with settling banks—banks that transfer money to and from DTC and NSCC on behalf of customers—to net settle any financial obligations.

14

GAO
Accountability * Integrity * Reliability

Background

- Between 2000 and 2008, six registered clearing agencies provided significant clearing functions to the U.S. markets.
  - DTCC subsidiaries NSCC, DTC, and the Fixed Income Clearing Corporation
    - Cleared and settled nearly all U.S. market trades in equities, corporate and municipal bonds, and a portion of the trades in mortgage backed securities, government backed securities, money market instruments, and over-the-counter derivatives.
  - Boston Stock Exchange Clearing Corporation and the Securities Clearing Corporation of Philadelphia[4]
    - Provided specialized clearance and settlement services to their members, but, ultimately, forwarded or “introduced” their member transactions to NSCC for clearance and settlement.
  - The Options Clearing Corporation
    - Cleared and settled trades in options and securities futures.

[4]NASDAQ OMX acquired the Securities Clearing Corporation of Philadelphia and the Boston Stock Exchange Clearing Corporation in July 2008 and August 2008, respectively, and intends to launch the NASDAQ Clearing Corporation in 2009.

15

GAO
Accountability * Integrity * Reliability

Background

- Section 17A of the Exchange Act established a system of SEC registration for clearing agencies and included general criteria that clearing agencies must satisfy in order to be registered. The Division of Trading and Markets provided further guidance to clearing agencies by issuing written standards.
    - The standards discuss financial and operational requirements, corporate governance, the capacity to enforce rules and discipline participants, the safeguarding of securities and funds, and the prompt and accurate clearance and settlement of securities transactions.
- Section 17a required clearing agencies to maintain prescribed books and records. Section 17b provided SEC with examination authority over all books and records.
- Section 19 of the Exchange Act established clearing agencies as SROs. It also established a framework for SEC oversight over the SROs, providing for SEC review and approval of a majority of clearing agency rules.

16

GAO
Accountability * Integrity * Reliability

Background

- SEC oversees clearing agencies primarily through its Division of Trading and Markets, OCIE, and Division of Enforcement.
  - The Division of Trading and Markets administers and executes the agency's programs relating to the structure and operation of the securities markets, which include regulation of clearing agencies and review of their proposed rule changes.
  - OCIE examines clearing agencies to assess the overall safety, reliability, and efficiency of the clearing agency and its operations. It also examines clearing agencies' compliance with their own rules and applicable federal laws and regulations.
  - The Division of Enforcement investigates and prosecutes violations of securities laws.

17

GAO
Accountability * Integrity * Reliability

Objective 1

1) Provide an overview of NSCC and DTC processes for clearing and settling equities trades, including their processes for identifying and addressing FTD.

18

GAO
Accountability * Integrity * Reliability

U.S. Equity Market Clearance and Settlement

- NSCC provides clearing and settlement, risk management, central counterparty services, and guarantee of completion in the event of a member default for virtually all broker-to-broker trades involving equities and exchange traded debt.
- DTC is the central depository and acts as a custodian for the majority of securities issues.
  - DTC, through its nominee Cede & Co., owns most of the equity and debt issues traded in U.S. markets.
    - Broker-dealer/clearing firm participants in DTC, in turn, own a pro-rata beneficial interest in the aggregate number of shares of a securities issue held by DTC.
    - The ultimate beneficial owners (that is, investors), each own a pro-rata beneficial interest in the shares in which their broker-dealer has a beneficial interest.
  - DTC transfers ownership, in book-entry form, during settlement.

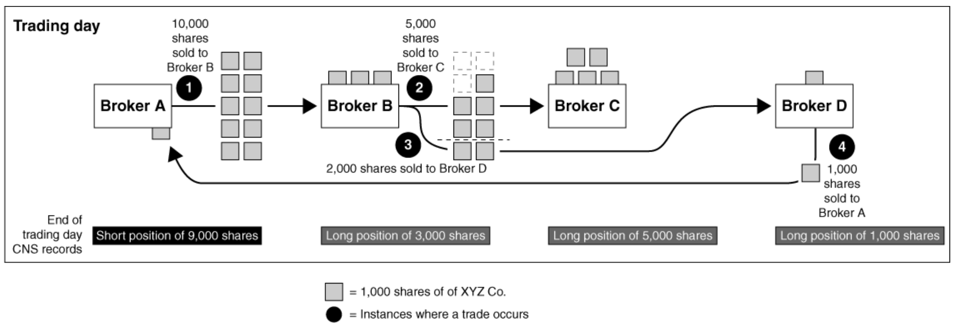
19

Continuous Net Settlement

- Due to the volume and value of trading in today's markets, NSCC nets trades and payments among its participants, using CNS.
  - CNS system is a book entry accounting system in which each NSCC member's daily purchases and sales of a security, based on trade date, automatically are netted into one long position (right to receive securities from NSCC) or one short position (obligation to deliver securities to NSCC) for each security issue purchased or sold.
  - The member's corresponding payment obligations are similarly netted into one obligation to receive or one obligation to pay money.
  - Figure 1 illustrates how CNS nets a member's trades into one long or short position.
  - Figure 2 illustrates net sellers' delivery of shares to NSCC and NSCC's delivery of shares to net buyers.

GAO
Accountability * Integrity * Reliability

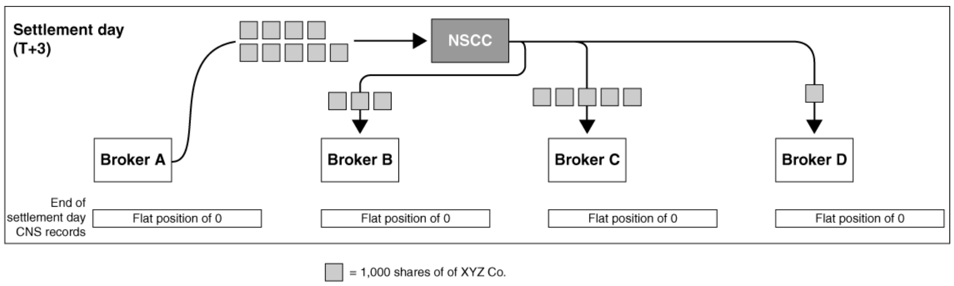
Figure 1: Netting of Trades into One Long Position (Net Buyer) or Short Position (Net Seller)



Source: GAO.

GAO Accountability * Integrity * Reliability

Figure 2: Delivery to NSCC from Net Sellers and NSCC Delivery to Net Buyers



Source: GAO.

22

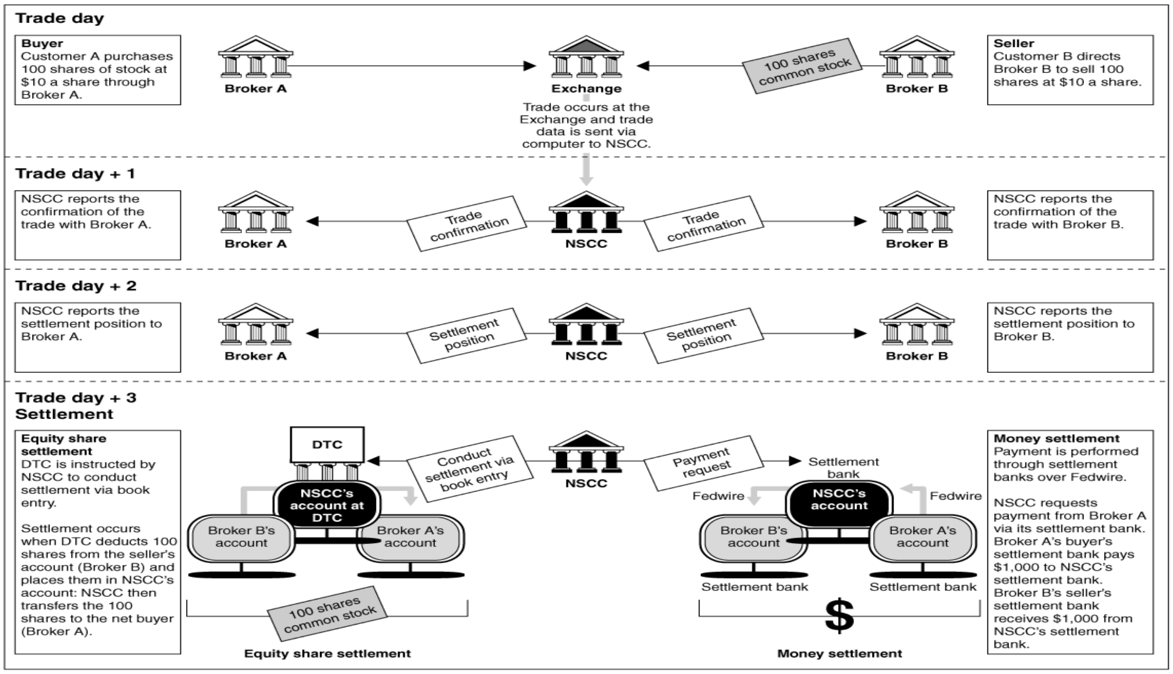
U.S. Equity Market Clearance and Settlement

- Trade clearance and settlement in the U.S. operates on a Trade Date (T) plus 3 settlement day (T+3) cycle.
  - T: Trade occurs and trade information is sent to NSCC, mostly on a “locked-in” basis.
  - T+1: Results of trade comparison and matching are sent to direct participants.
  - T+2: NSCC determines participants’ net settlement positions.
  - T+3: Settlement date—securities are delivered and payment is made through DTC and NSCC.
- Figure 3 illustrates the T+3 settlement cycle.

23

GAO
Accountability * Integrity * Reliability

Figure 3: Clearance and Settlement of Depository-Eligible Equity Shares



Sources: GAO analysis of NSCC data; Art Explosion (images).

24

Failure to Deliver During Clearance and Settlement

- If a member fails to deliver the total number of securities owed NSCC on a particular settlement date, NSCC may be unable to meet its delivery obligations, resulting in a fails to receive (FTR) for the participant that is due securities (see table 1).
  - NSCC uses SBP to borrow shares to meet as many of its delivery obligations as possible.
  - In SBP, participants can instruct NSCC as to specific securities from their DTC account that are available for borrowing to cover NSCC's CNS delivery shortfalls in those securities.
  - DTC debits any shares it borrows from the lender's DTC account. NSCC creates a right to receive position for lenders in CNS (see table 2).
  - Any delivery made using the SBP does not relieve the participant that fails to deliver from its delivery obligation to NSCC (see table 2).
  - According to DTCC, SBP generally covers between 15-20 percent of the FTD each settlement cycle.

25

Table 1: NSCC/DTC Positions Prior to SBP Loan

•Transaction: Seller S sells 1000 ABC to Buyer B and FTD

Participant	NSCC Position	DTC Position
Seller S	Short 1000 ABC	0 ABC
Buyer B	Long 1000 ABC	0 ABC
Lender L	Flat	1000 ABC

- Buyer B has no shares in its DTC account due to delivery shortfall.
- Lender L has 1000 shares available to lend.

26

GAO
Accountability * Integrity * Reliability

Table 2: NSCC/DTC Positions After SBP Loan

Participant	NSCC Position	DTC Position
Seller S	Short 1000 ABC	0 ABC
Buyer B	Flat	1000 ABC
Lender L	Long 1000	0 ABC

- NSCC borrows 1000 ABC from Lender L and delivers to Buyer B.
- NSCC creates a long 1000 position for Lender L.
- Seller S continues to have an obligation to deliver 1000 ABC to NSCC.

27

U.S. Equity Market Clearance and Settlement

- Unfulfilled FTR or FTD positions are rolled over into the next settlement cycle.
- Members with a FTR position not filled through SBP have three options for receiving the securities they are owed.
  - Normal course of business: Wait until NSCC receives securities and CNS allocates them to the FTR position.
  - Request priority in CNS: Priority FTR positions will be filled with any securities NSCC receives after all buy in requests are fulfilled, but before CNS begins allocating received shares to other members with net short positions in the security.[5]
  - Initiate a buy-in: File paperwork with NSCC requiring it to request a net short member to deliver securities to NSCC and for NSCC to deliver those securities to the net long member. If the position remains unfilled, NSCC instructs the member to buy in the unfilled position. (NSCC has no authority under SEC rules to force a buy in.)
    - DTCC officials explained that approximately 6,000 notices of intention to buy in are filed each day, with approximately 20 resulting in executions. Relatively few are executed because the FTD generally resolve in the normal course of business.

---

[5] NSCC employs an algorithm to allocate shares to members with net short positions. The algorithm is based on priority groups in descending order, age of position within priority group, and random numbers within age group.

28

Objective 2

2) Describe SEC's efforts to ensure the reliability and efficiency of the clearance and settlement system through its examination program for clearing agencies.

Clearing Agency Examination Program

- OCIE oversees the examination program for clearing agencies and executes it through the New York Regional Office, Chicago Regional Office, and Philadelphia Regional Office.
- The program does not have dedicated examiners. Instead, examiners from the broker-dealer oversight program also conduct clearing agency examinations, as needed.
    - Examination teams typically consist of the Assistant Regional Director, a Branch Chief, and from 2 to 6 examiners.
    - Examiners typically work on a clearing agency examination full-time for approximately 3 months.
    - OCIE officials said that examiners' level of experience varies within a team, but they usually are experienced broker-dealer examiners. According to OCIE, in every regional office an experienced team leader provides examination oversight and continuity.
        - As part of its broker-dealer examiner training program OCIE provides general clearance and settlement training. In addition, OCIE offers specialized training for clearing agency examiners annually.

30

Accountability * Integrity * Reliability

Clearing Agency Examination Cycle

- Clearing agency examinations include regular cycle and special examinations.
  - The largest registered clearing agencies (including NSCC and DTC), which provide centralized clearing services, are examined on a cycle of every other year. The smaller clearing agencies are examined on a 2- or 3-year cycle, depending on resources. Our review found that OCIE conducted cycle examinations according to this schedule.
- Some clearing agency examinations are targeted examinations that cover the activities of more than one clearing agency.

31

GAO
Accountability * Integrity * Reliability

Clearing Agency Examination Guidance

- To assist examiners in planning and conducting examinations, OCIE has developed written guidance. OCIE revised and expanded this guidance in March 2007. The new guidance discusses aspects of planning and conducting an examination consistent with inspection community best practices.
- Specifically, the new guidance provides information related to
  - background on the registered clearing agencies, their functions, and the legal framework governing them;
  - examination planning, including staffing, risk-assessment, and coordination with other SEC divisions and federal and state regulators of clearing agencies;
  - field work, including interviews, document requests and reviews, sample and testing parameters, and exit interviews;
  - the preparation of examination reports and deficiency letters, including report content, format, and the review process; and
  - the review and tracking of clearing agencies' responses to the examination findings and recommendations.

32

GAO
Accountability * Integrity * Reliability

Examination Approach

- The guidance directs OCIE examiners to use an internal controls approach to assess a clearing agency's safety, reliability, and efficiency.
  - This approach requires examiners to gain an understanding of how the internal control structure functions at a given clearing agency and test controls over key clearing functions to identify any weaknesses.
- According to OCIE officials and the guidance, clearing agency examinations also are risk-based. Examiners can use multiple sources of information to identify high-risk areas.
- When planning an examination, examiners can leverage the work of the clearing agency's internal audit department or other auditors/regulators.
  - As part of its examination program, OCIE routinely reviews the internal audit functions of the registered clearing agencies.
- Pursuant to formal information-sharing agreements, OCIE shares examination information with federal and state banking regulators on-site at DTC.

33

Key Review Areas

- OCIE also has identified key areas on which examiners may focus during a review. Key areas are derived from the clearing agency standards, contained in Section 17A of the Exchange Act, and the interpretive guidance issued by the Division of Trading and Markets.
    - Examples of key areas reviewed in our sample of examinations included risk management, internal audit/controls, clearing fund administration, and clearing and settlement.
- The guidance discusses an examination approach for each key area. For clearing and settlement, examiners are to assess the procedures and controls relating to the processing of daily payments and collections and securities transactions.
- In a recent examination of NSCC's CNS/SBP program, examiners conducted this assessment though transaction testing, report validation, observation of the settlement process, and interviews.

34

GAO Accountability * Integrity * Reliability

2005 Examination of NSCC: Implementation of Regulation SHO

- As part of the NSCC examination, OCIE incorporated a review of NSCC's role in the implementation of SEC's recently issued Regulation SHO.
  - In particular, examiners reviewed the CNS short position reports that NSCC generates daily to identify FTD for each clearing participant in each security. NSCC transmits these reports electronically to SEC and SROs.
  - The reliability of the CNS short position reports is essential to the effective implementation of Regulation SHO. As discussed earlier, the SROs use FTD data generated from these reports to identify those securities with enough accumulated FTD to qualify as threshold securities and publish lists of them.
  - To test for data reliability, examiners assessed both the process NSCC uses to generate the reports and the internal controls NSCC employs to test and validate them. They also performed independent testing of a sample of securities included in the report.
  - The review did not raise any reliability concerns with the short position reports.

35

GAO
Accountability * Integrity * Reliability

2005 Examination of NSCC: Review of Stock Borrow Program (SBP)

- In response to media criticism and allegations made by certain issuers and shareholders that NSCC and DTC were facilitating naked short selling through the operation of SBP, OCIE also incorporated a review of SBP into the scope of its 2005 examination.
- These critics argued that SBP exacerbated naked short selling by creating and lending shares that are not actually in deposit at DTC, thereby flooding the market with shares that do not exist.
  - Specifically, they asserted that inappropriate accounting conventions at DTC allowed it to record stock loans made by lending participants and continue to report the loaned shares as free and available in the lender's depository account, thus allowing the shares to be loaned repeatedly by the same lender.

36

2005 Examination of NSCC: Review of Stock Borrow Program (SBP)

- We found that examiners tested stock borrow transactions in securities that were the focus of the above-referenced allegations or had high levels of prolonged FTD to determine if shares loaned through SBP were free and available in the lending participant's depository account prior to the transaction, and if they were deducted from that participant's account when the loan was made. The examination did not find any instances where critics' claims were validated.

37

Recommendation Tracking

- Examinations can result in findings and recommendations to the clearing agency. Examples of deficiencies OCIE identified in the examinations we reviewed included areas such as record retention, risk management, and clearing fund administration.
  - Twelve of the 13 examinations we reviewed contained evidence of follow-up on recommendations.[6]

[6] Current guidance states that examination report files should include the results of their recommendation follow-up. The one examination we reviewed where we did not see this evidence was from 2002, before the guidance was in effect. We did not review the underlying work papers to determine whether or not the follow-up had been completed.

38

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

OFFICE OF COMPLIANCE
INSPECTIONS AND
EXAMINATIONS

February 20, 2009

Orice M. Williams
Director,
Financial Markets and Community Investment
U.S. Government Accountability Office
441 G Street, N.W.
Washington, D.C. 20548

Re: GAO Draft Report "*Securities and Exchange Commission: Oversight of U.S. Equity Market Clearing Agencies*" (GAO-09-381R)

Dear Ms. Williams:

Thank you for the opportunity to review the Government Accountability Office's (GAO) draft correspondence letter and briefing slides entitled: "*Securities and Exchange Commission: Oversight of U.S. Equity Market Clearing Agencies.*" The draft report and briefing slides provide a valuable summary of the clearance and settlement system for the U.S. equities markets. As GAO notes in the draft report, an effective clearance and settlement process is vital to the functioning of the U.S. securities markets.

As part of this project, GAO also reviewed the SEC's efforts to ensure the reliability and efficiency of this system through its examination program for registered clearing agencies administered by the SEC's Office of Compliance Inspections and Examinations (OCIE). GAO made no recommendations in the draft report regarding OCIE's clearing agency examination program.

OCIE takes its responsibility to provide effective oversight of this process seriously, and, leveraging available resources, has developed a comprehensive examination program for the registered clearing agencies. In the draft report, the GAO notes that OCIE's clearing agency examination program: (i) has developed examination guidance that is consistent with inspection community best practices; (ii) meets its routine examination schedules for registered clearing agencies; (iii) provides specialized training in clearance and settlement issues to its examination staff; (iv) regularly reviews the work of clearing agency internal audit staff, and leverages, as appropriate, the work of internal audit as well as that of other federal and state regulators; and (v) identifies and regularly tracks the remediation of deficiencies and related recommendations made to clearing agencies through the examination process. In addition, GAO specifically reviewed OCIE's examination testing of the National Securities Clearing Corporation's continuous net settlement and stock borrow program in connection with its assessment of the SEC's actions to address short selling issues.

Orice M. Williams
February 20, 2009
Page 2

We would like to thank you and your staff for the opportunity to review GAO's draft report, and we appreciate the courtesy you and your staff extended to us during this review.

Sincerely,

Lori A. Richards
Director
Office of Compliance Inspections and Examinations

(250398)

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday afternoon, GAO posts on its Web site newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to www.gao.gov and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's Web site, http://www.gao.gov/ordering.htm.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Ralph Dawn, Managing Director, dawnr@gao.gov, (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548