

**Meeting Between Federal Reserve Staff  
and The Options Clearing Corporation (OCC)  
December 16, 2010**

**Participants:** Jeff Stehm, Stuart Sperry, Jennifer Lucier, Melissa Vanlandingham, Mark Magro, Mark Haley, Susan Foley, Jeff Walker, Danielle Little, Lyle Kumasaka, Stu Desch, Kara Handzlik, Pat White (Federal Reserve Board); Barry Maddix, Karrie Rodriguez (Federal Reserve Bank of Boston); Blake Laughter, Caitlin Smyth, Craig Majdecki, Eve Boboch, Ivana Ruffini, James Nelson, Jerome Julian, Jessica Lynch, Kelly Emery, Keri Trolson, Kirstin Wells, Richard Heckinger, Robert Steigerwald, Katie Wisby, Anna Voytovich (Federal Reserve Bank of Chicago); Stephanie Heller, Jennifer Wolgemuth, Joe Sommer, Annmarie Rowe-Straker, Brian Marchellos, Ari Cohen, Larry Sweet, Larry Radecki, Marsha Takagi (Federal Reserve Bank of New York)

Mike Cahill, William Navin, Mike Walinkas, John Fennell, Susan Milligan, Jean Cawley, Frank Larocca, Doug MacKay, Steve Szarmack (Options Clearing Corporation)

**Summary:** At the request of Board staff, representatives from The Options Clearing Corporation met with Board and Reserve Bank staff to give a presentation on the OCC's settlement and collateral practices and supporting banking arrangements (see attached presentation). Board staff requested the presentation to help inform the Board's rulemaking in relation to Section 806 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, regarding designated financial market utilities' potential access to Federal Reserve Bank accounts, services, and discount and borrowing privileges.

OCC staff opened with brief remarks on the clearinghouse's operations which included an overview of the OCC's membership profile and trade flows and then discussed the clearinghouse's settlement procedures and collateral management which included details on the physical settlement of equity options. OCC staff followed with a discussion of the clearinghouse's financial resources and liquidity arrangements. The presentation concluded with a discussion of the OCC's liquidation and close-out procedures.

During the discussion, OCC staff stated that access to a Federal Reserve account for overnight deposit of U.S. dollar balances associated with initial margin and other risk management resources might be of use to the clearinghouse from a credit risk management perspective. OCC staff also mentioned that access to the Federal Reserve's National Settlement Service (NSS) and Fedwire are of interest, but that further analysis is required to determine whether access to these services would facilitate the clearinghouse's settlement process. In addition, OCC staff mentioned that access to the Federal Reserve's discount window may be useful in certain emergency situations where the OCC's commercial bank liquidity facilities have been exhausted.

# OCC Collateral and Settlement

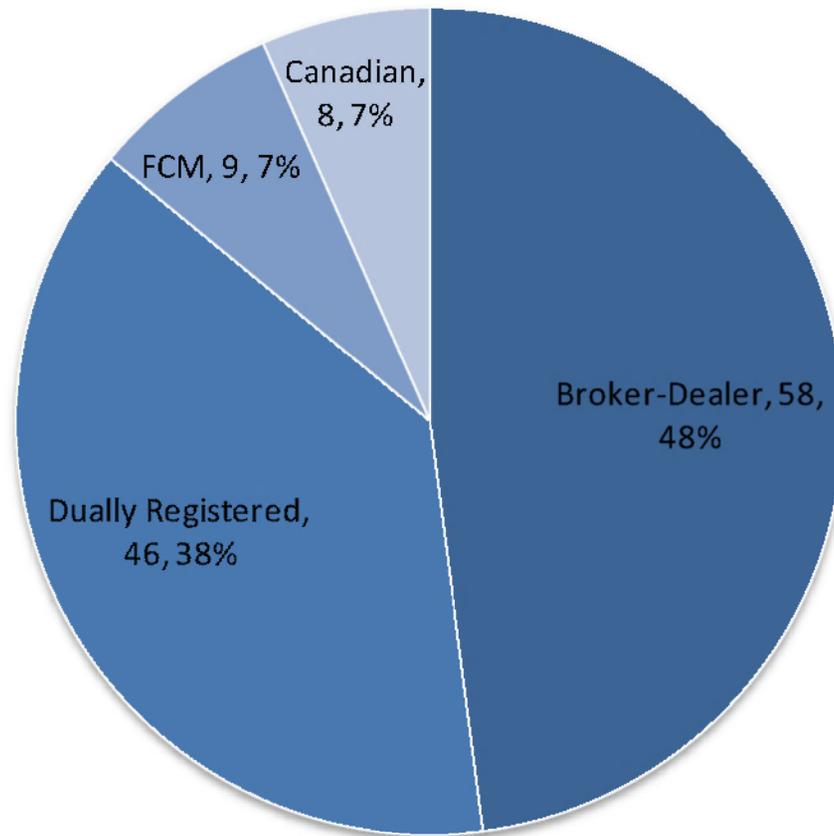
Clearing Infrastructure – December 16, 2010



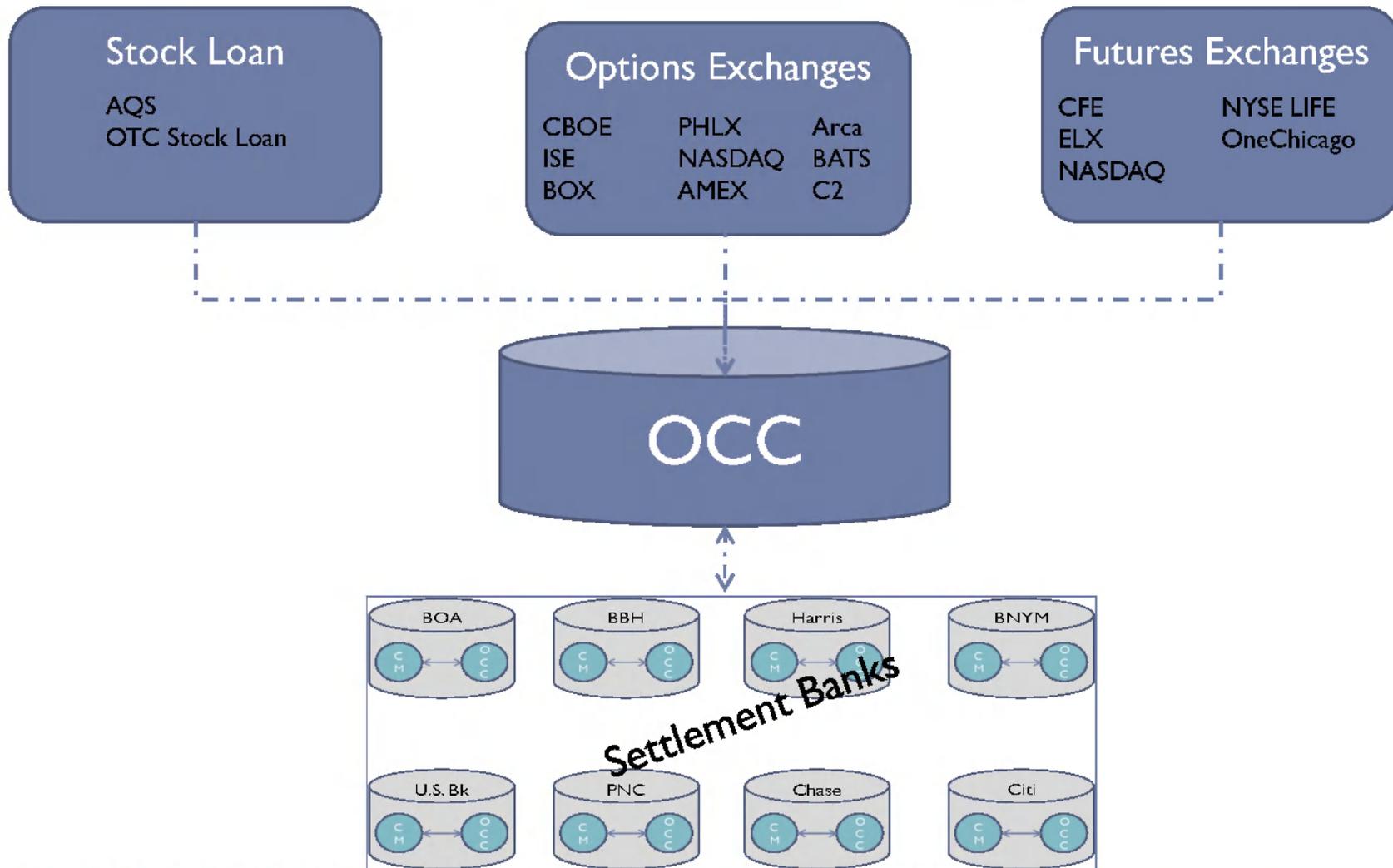
# OCC Overview

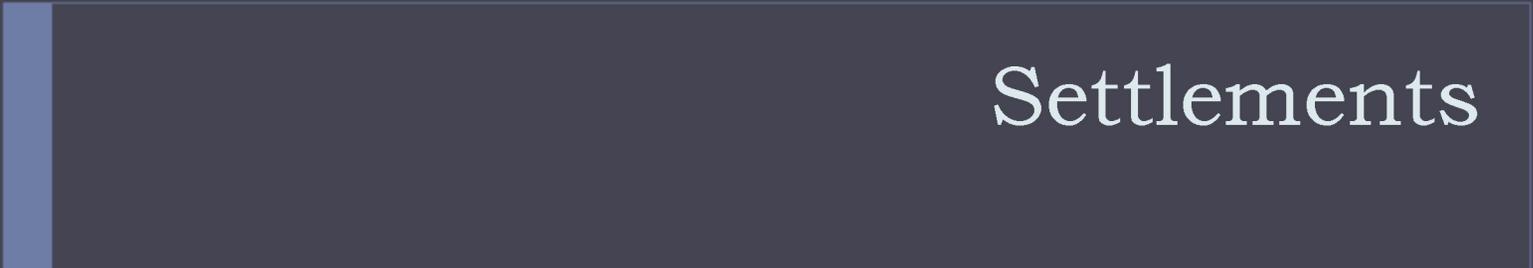
# Clearing Member Profile

---



# Trade Flow





# Settlements

# Settlements

---

- ▶ OCC settles debits at 9:00 AM Central Time and pays credits at 10:00 AM
- ▶ Settlements include:
  - ▶ Trade Premium
  - ▶ Stock Loan and Futures Marks
  - ▶ Exercise settlements for cash-settled options
  - ▶ Margin Deficits
- ▶ Intraday cash movements during Fedwire hours
  - ▶ Cash margin withdrawals (credits)
  - ▶ Intraday margin calls (debits)
  - ▶ Cross margin futures variations
  - ▶ Margin substitutions

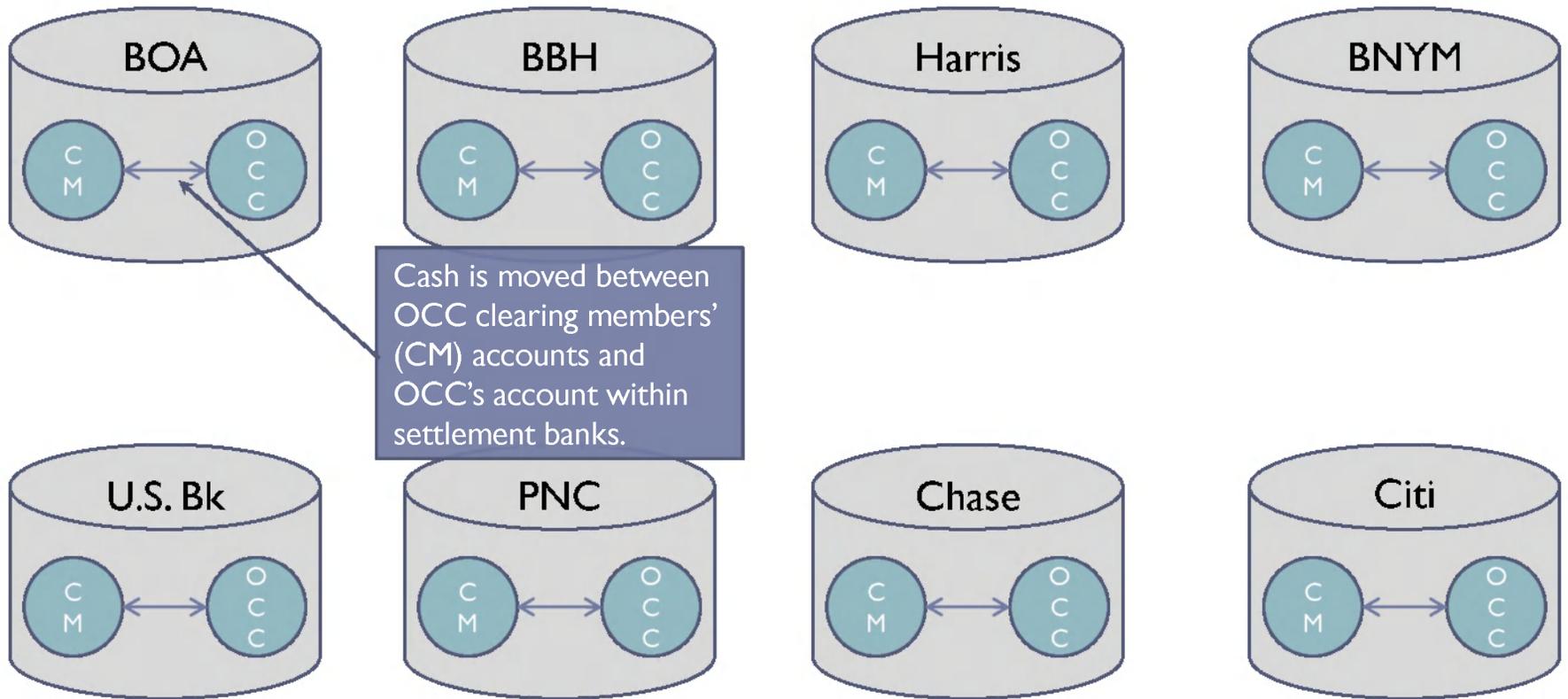
# Settlement Banks

---

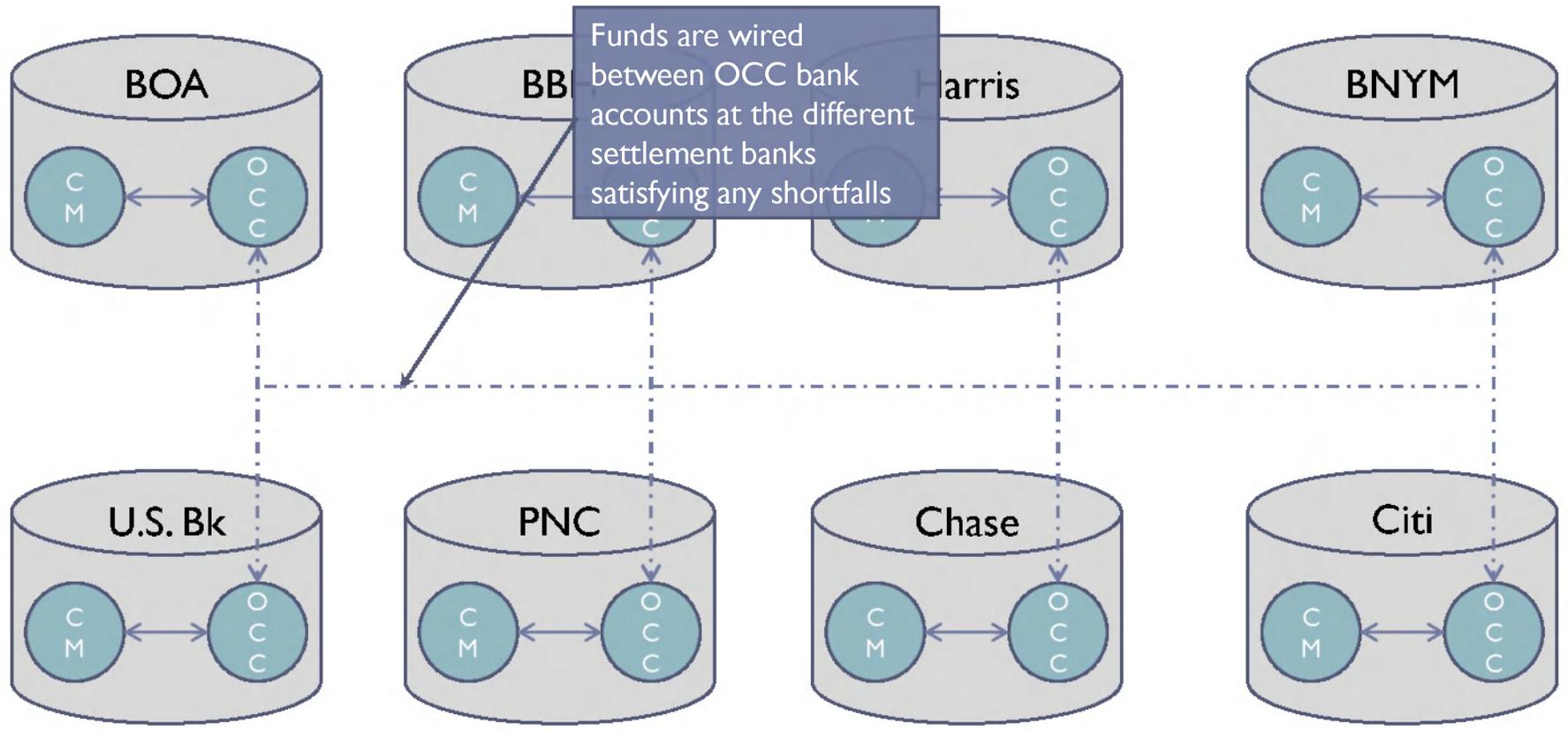
- ▶ Harris N.A.
- ▶ Bank of America, N.A.
- ▶ U.S. Bank
- ▶ The Bank of New York Mellon
- ▶ Brown Brothers Harriman & Company
- ▶ Citibank, N.A.
- ▶ JPMorgan Chase Bank, N.A.
- ▶ PNC Bank, N.A.
- ▶ Bank of Montreal

# Settlement Bank Approval

---



# Settlement Bank Cash Settlement



# *Confidential Treatment Requested*

---

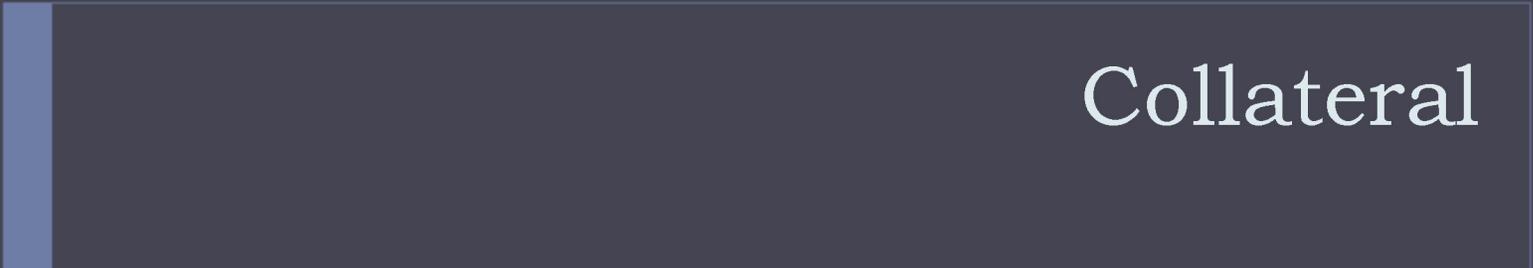
# *Confidential Treatment Requested*

---

# Cash Deposits

---

- ▶ Margin and Clearing Fund cash deposits segregated from OCC's working capital
- ▶ Cash margin supporting securities or segregated futures customers is segregated from firm margin cash
- ▶ Cash balances are invested on an overnight basis in U.S. Treasuries
- ▶ Investments are unwound each morning with funds being made readily available same day



# Collateral

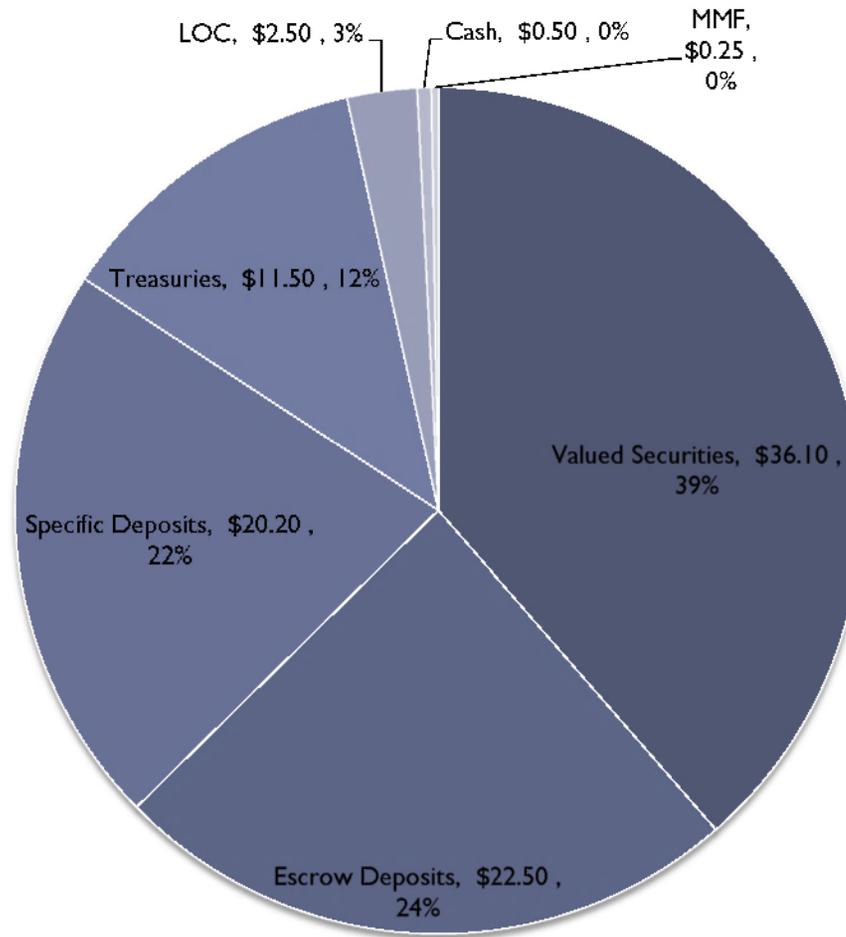
# Collateral Types

---

- ▶ **Forms of Margin**
  - ▶ Cash
  - ▶ Government Securities
  - ▶ Government Sponsored Debt
  - ▶ Letters of Credit
  - ▶ Money Market Mutual Funds
  - ▶ Valued Securities
- ▶ **Forms of Cover**
  - ▶ Specific Deposits
  - ▶ Escrow Deposits

# Collateral Breakdown

---



# *Confidential Treatment Requested*

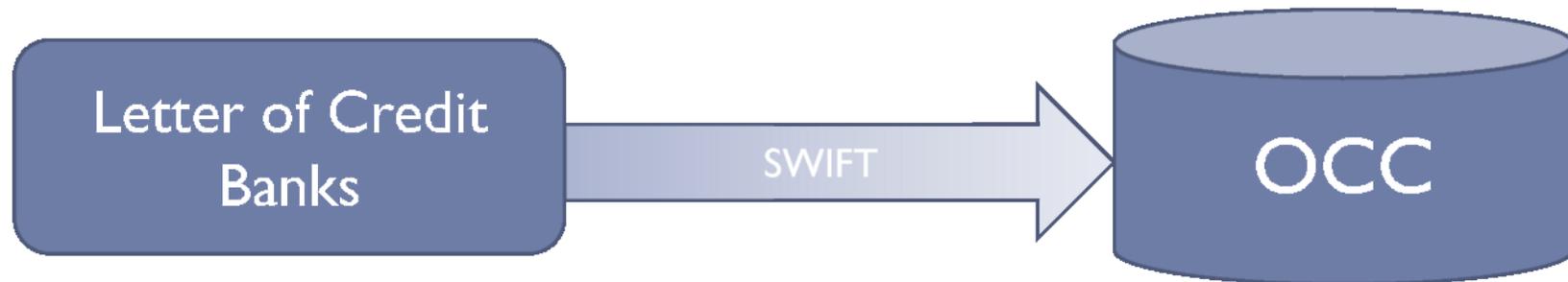
---

# *Confidential Treatment Requested*

---

# Letters of Credit

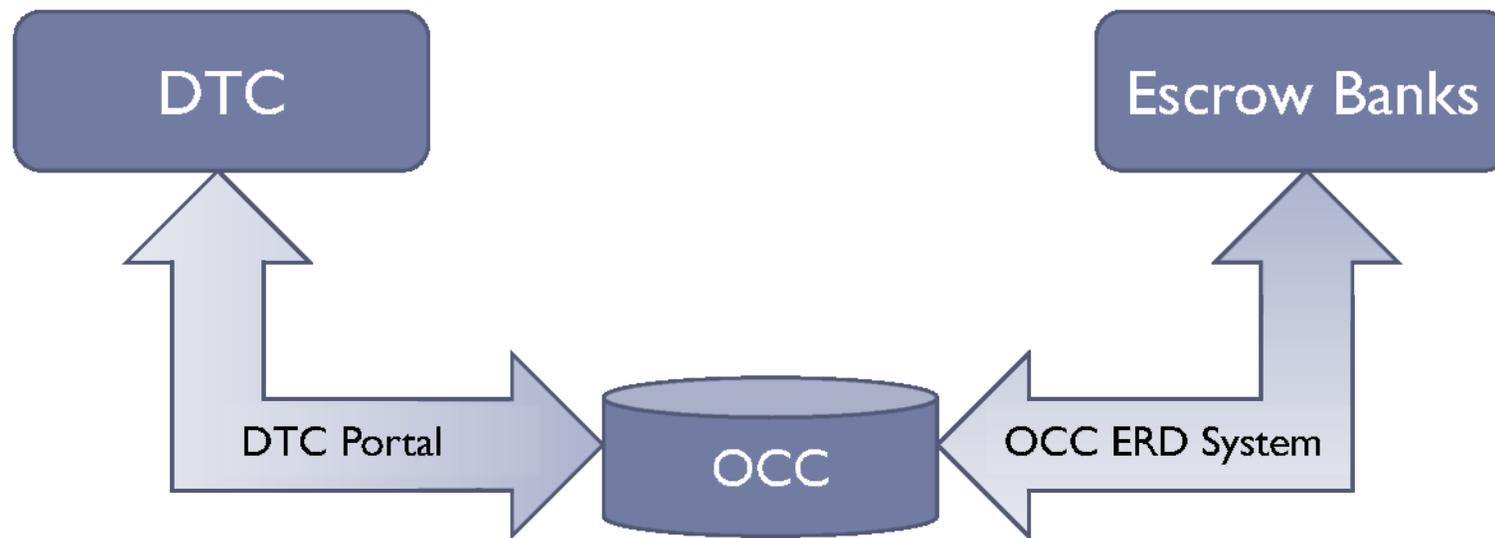
---



- ▶ Provides for both U.S. and Foreign Issuers of LOCs
- ▶ Concentration limits:
  - ▶ Less than 20 % of margin comprised by FLOC from single inst.
  - ▶ Less than 50% of margin in total comprised of FLOC's
  - ▶ LOC issued by one institution (foreign or domestic) to one member must be less than 15% of that institution's shareholders' equity
- ▶ Letters of credit are submitted in hard copy form
- ▶ All increase and decrease messages are processed via SWIFT messages

# Stock, Escrows & Money Markets

---



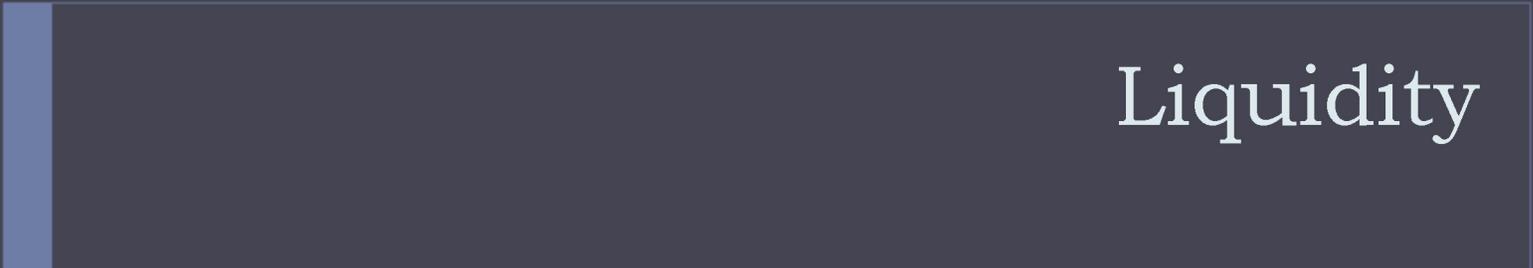
- ▶ OCC maintains electronic interfaces with custodians and DTC
- ▶ Pledge instructions and release requests are submitted via a messaging process

# Physical Settlement of Equity Options

# Physical Settlement

---

- ▶ Equity options and single stock futures settle in shares at exercise or expiry
- ▶ Exercises/expiries are reported as trades to the OCC members' corresponding NSCC accounts
- ▶ Deliveries are settled within NSCC's continuous net settlement (CNS) process
- ▶ Transactions are settled at the strike for options and last mark for futures
- ▶ Settle in traditional equity T+3 cycle



# Liquidity

# Liquidity Needs

---

- ▶ **Daily cash settlements arising from:**
  - ▶ Option trade premium
  - ▶ Stock loan and futures marks
  - ▶ Cash proceeds from exercises of cash-settled options
- ▶ **OCC would typically be aware of a default no later than 9:00 AM Central Time**
- ▶ **Liquidity must be available by 10:00 AM Central Time settlement deadline (Board has authorized moving that deadline to 1:00 p.m. Central Time subject to regulatory approval)**

# Liquidity Resources

---

- ▶ **Committed and Immediate Resources:**
  - ▶ Defaulting clearing member's cash margin deposits
  - ▶ Defaulting clearing member's cash Clearing Fund deposits
  - ▶ Committed credit facility
  - ▶ Non-defaulting clearing members' cash Clearing Fund deposits
  - ▶ Tri-party repo proceeds from liquefied Clearing Fund deposits
  - ▶ OCC working capital

# *Confidential Treatment Requested*

---

# *Confidential Treatment Requested*

---

# *Confidential Treatment Requested*

---

# Liquidation / Close-out

# *Confidential Treatment Requested*

---

# OCC Collateral and Settlement

Clearing Infrastructure – December 16, 2010