FEDERAL RESERVE BANK of NEW YORK

Overview of the U.S. Payments, Clearing and Settlement Landscape

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- Clearing systems
 - Central counterparties (CCPs)
- Settlement systems
 - Securities settlement systems (SSS)
 - Central securities depositories (CSDs)
- Payment systems
 - Large-value
 - Retail
- Recording
 - Trade repositories (TRs)
- Supporting Systems
 - Messaging

Main Players in the U.S.

	Main Players:	Title VIII Designation:
ССР	 National Securities Clearing Corporation (NSCC) Fixed Income Clearing Corporation (FICC) Chicago Mercantile Exchange Clearing (CME) ICE Clear Credit (ICC) The Options Clearing Corporation (OCC) LCH. Clearnet LLC (LCH) ICE Clear US 	 DFMU DFMU DFMU DFMU DFMU Not designated Not designated
SSS and CSD	Fedwire SecuritiesThe Depository Trust Company (DTC)	CB-operatedDFMU
Payments System	 Large-value payments systems Fedwire Funds National Settlement Service (NSS) CHIPS Continuous Linked Settlement Bank (CLS) Retail ACH (eg. FedACH and EPN) Check Clearing (eg. Fed, SVPCo, Viewpoint) Credit (eg. VISA) and Debit Card Systems 	 CB-operated CB-operated DFMU DFMU Not designated Not designated Not designated Not designated
TRs	 DTCC Data Repository (U.S.) LLC ICE Trade Vault CME Swap Data Repository Bloomberg Swap Data Repository 	• N/A
Supporting	• SWIFT	• N/A

Transaction Flow



Clearing

 Definition – the process of transmitting, reconciling, and in some cases, confirming transactions prior to settlement and potential netting



- Central Counterparty (CCP)
 - An entity that interposes itself between counterparties to contracts traded in one or more financial markets
 - Becomes the buyer to every seller and the seller to every buyer for the contracts it clears

Clearing (continued)

- U.S. CCPs are already widely used for securities and/or derivatives market
 - Growing importance due to implementation of U.S. central clearing requirements for OTC derivatives

Main CCPs in U.S.	Main products cleared	Title VIII Designation:
National Securities Clearing Corporation (NSCC)	Equities; corporate and municipal bond markets	DFMU
Fixed Income Clearing Corporation (FICC)	US government securities and agency securities	DFMU
Chicago Mercantile Exchange Clearing (CME)	Futures and options (both exchange- traded and OTC)	DFMU
ICE Clear Credit (ICC)	Credit default swaps	DFMU
The Options Clearing Corporation (OCC)	Equity options and commodity futures (exchange traded)	DFMU
LCH. Clearnet LLC (LCH)	Interest rate swaps	Not designated
ICE Clear US	Agricultural futures and options (exchange-traded)	Not designated

Settlement

- Definition: The transfer of ownership involving the exchange of securities and payments
- Securities settlement systems (SSS)
 - Enables securities to be transferred by book entry
 - Securities can be transferred either free of payment or against payment
 - If securities are delivered against payment, it is called Deliveryversus-payment (DvP)
- Central securities depositories (CSD)
 - An entity for holding securities, either physical form or electronic form
 - Helps to ensure the integrity of securities issues
 - Ensures that securities are not accidentally or fraudulently created or destroyed or their details change

- Fedwire Securities
 - SSS and CSD operated by the Federal Reserve
 - DvP
 - Real-time gross settlement (RTGS)
 - Participants: Federal Reserve account holders
 - Eligible securities: Securities issued by the U.S. government (US Treasuries), government-sponsored enterprises, and certain international organizations
- The Depository Trust Company (DTC)
 - Private-sector SSS and CSD operated by DTCC
 - Participants: Brokers, dealers, banks, investment companies
 - Eligible securities: Equities, corporate bonds, municipal bonds and money market instruments

Payment Systems

- Definition: Transfer of funds between or among participants
- Large-value payment systems (LVPS)
 - Funds transfer system that typically handle large-value payments and time-critical payments
 - In the U.S., operated by both private sector and public sector entities
- Retail Payment Systems

Payment Systems - LVPS

- Fedwire Funds and Fedwire Securities
 - Real-time gross settlement system operated by the Federal Reserve
 - Participants: Federal Reserve account holders
 - An institution that maintains an account at a Federal Reserve Bank is allowed to be a Fedwire Funds participant
 - Institutions send funds, in central bank money, for their own accounts and on behalf of customers

Payment systems - LVPS (continued)

- National Settlement Service (NSS)
 - Multilateral settlement service operated by the Federal Reserve
 - Agent submits an electronic file of net positions. Debit positions deducted from participant account. Then, credits are processed
 - Agents: CCPs, SSSs, and LVPS
 - Participants: Federal Reserve account holders
- Clearing House Interbank Payment Systems (CHIPS)
 - U.S. dollar funds transfer system operated by The Clearing House
 - Participants: Must reside in the US and be subject to supervision by US state or federal banking supervisors.

Payment systems – LVPS (continued)

- Continuous Linked Settlement Bank (CLS)
 - Bilateral FX settlement system for 17 currencies
 - Payment-versus-payment (PvP)
 - Participants: Large financial institutions

Payment Systems - Retail (continued)

- Retail payment systems
 - Funds transfer system that typically handles a high volume of relatively low-value payments
 - Retail payments are mainly made by consumers and between businesses to purchase goods and services
 - In U.S., operated by both the private sector and public sector
 - ACH (eg. FedACH and EPN)
 - Check Clearing (eg. Fed, SVPCo, Viewpoint)
 - Credit (eg. VISA) and Debit Card Systems

Recording

- Trade repositories (TRs)
 - An entity that maintains a centralized electronic record (database) of transaction data.
 - Similar to CCPs, TRs have recently grown in importance, particularly in the OTC derivatives markets
 - In the U.S., the major players are:
 - DTCC Data Repository (U.S.) LLC
 - ICE Trade Vault
 - CME Swap Data Repository
 - Bloomberg Swap Data Repository

- SWIFT
 - Global network messaging services supporting correspondent banking and financial market utilities
 - Not a payment or settlement system
 - Does not hold accounts and does not settle payments
 - Participants/Members: Large financial institutions (e.g. banks, securities broker/dealers), financial market infrastructures (e.g. payment systems)