FRM Part 1

Book 3 - Financial Markets and Products

EXCHANGES, OTC DERIVATIVES DPCs AND SPVs

Learning Objectives

After completing this reading you should be able to:

- ✓ Describe how **exchanges** can be used to **alleviate counterparty risk**.
- ✓ Explain the developments in **clearing that reduce risk**.
- ✓ Compare **exchange-traded** and **OTC markets** and describe their uses.
- ✓ Identify the **classes of derivative securities** and explain the risk associated with them.
- ✓ Identify **risks associated with OTC markets** and explain how these risks can be **mitigated**.

How Exchanges Alleviate Counterparty Risk

- An exchange is a central financial location where traders can trade (exchange) **standardized financial instruments** such as futures contracts.
- A major risk when trading derivatives is **counterparty risk**.
  - Organized exchanges use several mechanisms to **alleviate counterparty risk**. These include:

1. **Clearing**: reconciling and resolving of contracts between counterparties, and takes place between trade execution and trade settlement.
2. **Margining**: receiving and paying cash or other assets against gains and losses in their positions.
3. **Netting**: offsetting of contracts, which can take the form of direct clearing, ring clearing, and complete clearing.

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How Exchanges Alleviate Counterparty Risk

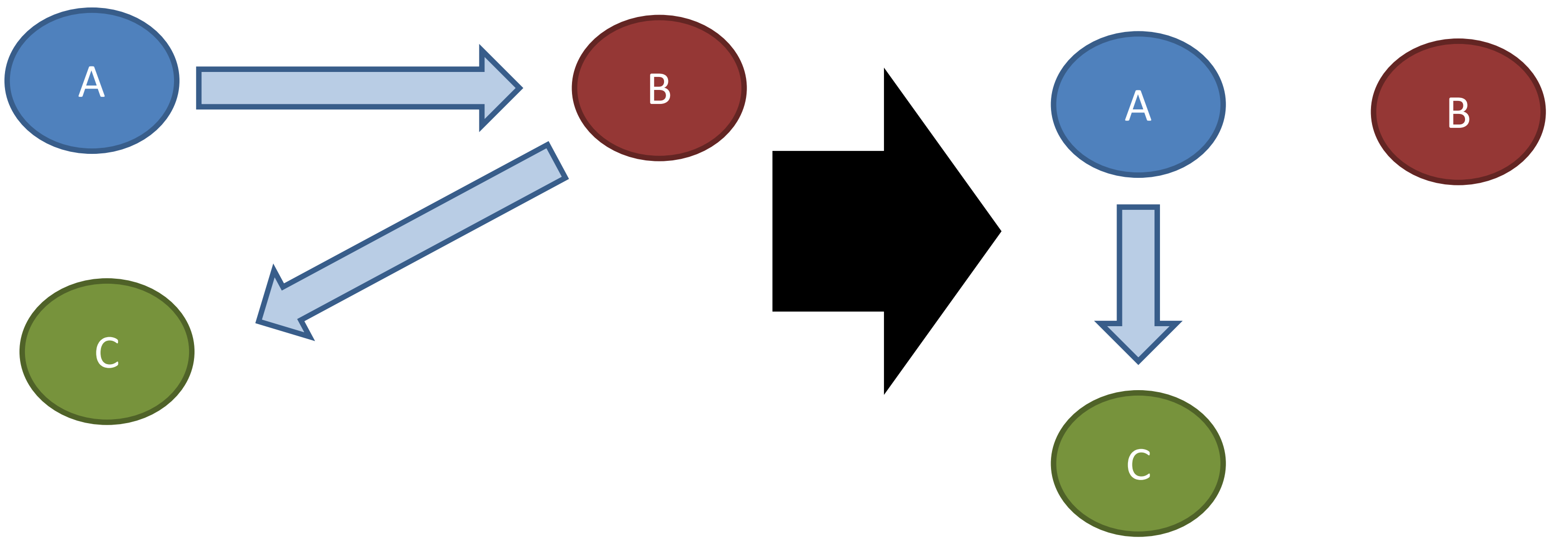
1. Direct clearing

- This simply refers to the bilateral reconciliation of commitments between the **original two counterparties**.

How Exchanges Alleviate Counterparty Risk

2. Clearing rings

- Clearing rings simplify the **dependencies** of a member's open positions and allow them to close out contracts more easily, increasing liquidity.

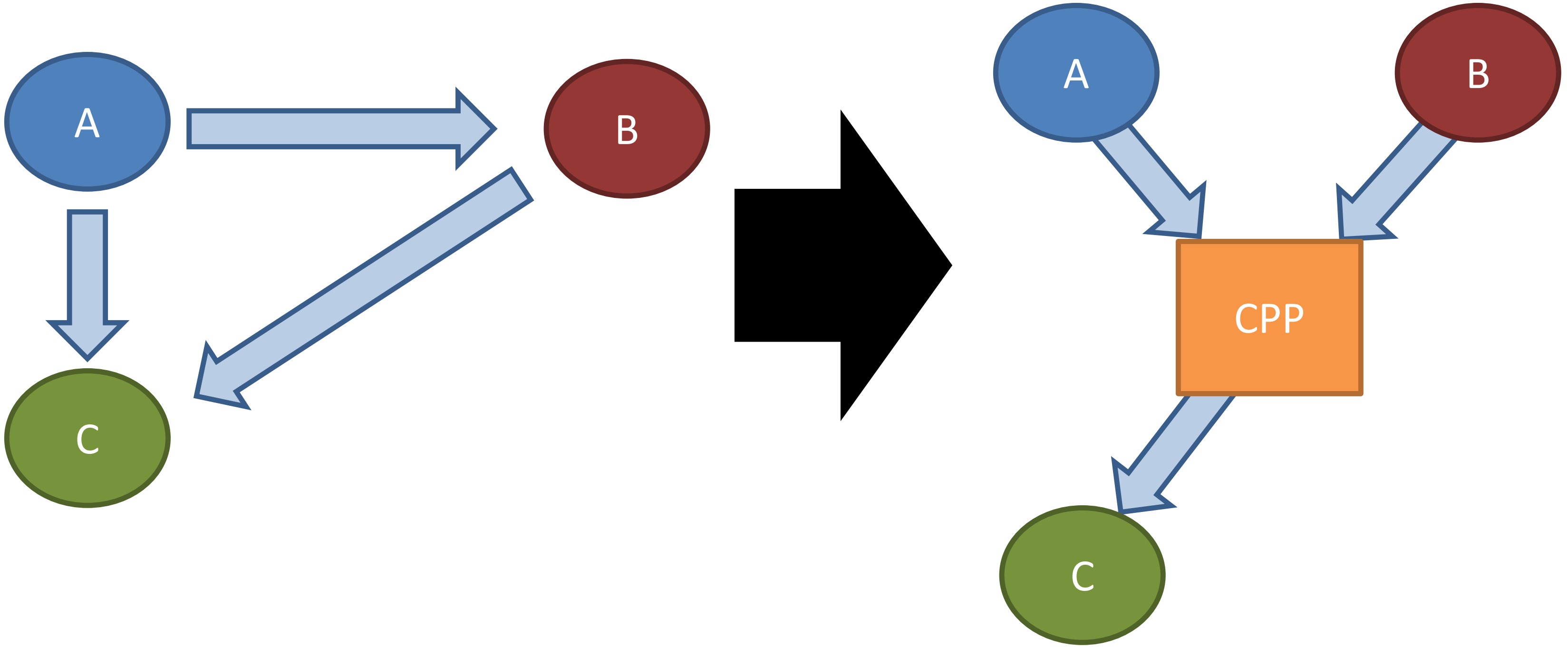


- ➢ Clearing rings **do not completely eliminate** the counterparty risk.

How Exchanges Alleviate Counterparty Risk

3. Complete clearing

- All exchange-traded contracts nowadays are using to central clearing.
  - The CCP function may either be **operated by the exchange** or provided to the exchange as a service by an **independent company**.



Over-the-counter Trading

- A key feature of many OTC derivatives is that they are not settled for a long time since they generally have **long maturities**.
- OTC derivatives have traditionally been negotiated between a **dealer** and **end user** or **between two dealers**.
  - Prior to 2007, while the OTC market was the largest market for derivatives, it was **largely unregulated**.
- A customer wanting to **unwind a transaction** must do it with the **original counterparty**, who may quote unfavorable terms due to their privileged position.

Counterparty Risk Mitigation in OTC Markets

- Systemic risk refers to a market-wide event that would originate from an **initial park** only to trigger a **chain reaction** that could devastate the financial markets.
  - Such a spark could be the failure of a player considered "**too big to fail**."
- Historically, most OTC risk mitigants focused on **reducing the possibility of the initial spark.**
  - However, there are now more ways to mitigate counterparty risk.

1. Special Purpose Vehicles

- SPVs aim essentially to change **bankruptcy rules**. In a bankruptcy, certain parties can receive **favorable treatments** at the expense of others.
  - If a derivative counterparty defaults, the SPV ensures that the **client whose funds are at risk** can still **receive their full investment** prior to payment of any other outstanding claims.
- An SPV transforms **counterparty risk into legal risk**.

Counterparty Risk Mitigation in OTC Markets

2. Derivatives Product Companies (DPCs)

- DPCs are generally AAA-rated entities set up by one or more banks as a **bankruptcy-remote subsidiary** of a major dealer.
  - Examples include Merrill Lynch Derivative Products, Morgan Stanley Derivative Product, etc.
- A DPC defined what events would **trigger its own failure** (a rating downgrade of the parent, for example).
- After the failure of some parent companies in **2007-2008**, the DPC concept was essentially killed.
  - The perceived triple-A ratings of DPCs had **little credibility** as the counterparty being faced was really the **parent company**.

Counterparty Risk Mitigation in OTC Markets

3. Monolines and CDPCs

- A monoline insurer is a company with **strong credit ratings** (such as AIG) which it utilizes to provide financial guarantees called “credit wraps.”
  - However, the failure of those companies in 2007-2008 also meant the end of most monoline insurers.

4. Credit Product Derivatives Companies (CDPCs)

- A CDPC is a **special purpose entity** that sells credit protection under credit default swaps or certain approved forms of insurance policies.
  - In some cases, they can also buy credit protection.
- Like monolines, these were **highly leveraged** and typically **did not post margin**.
  - Some CPDCs stopped being rated by rating agencies in 2008.

Counterparty Risk Mitigation in OTC Markets

5. Clearing in OTC Derivatives Markets

- OTC transactions are still negotiated privately and off-exchange but are then **novated into a CCP** on a post-trade basis.
  - Some firm clear and settle repurchase agreements, plain vanilla swaps, and OTC energy derivatives.

- In the next chapter, we'll be focusing on the **mechanics of central clearing** in OTC products.

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