

Derivatives clearing, central counterparties and novation: The economic implications

by

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*The views expressed herein are our own and not necessarily those of
the Eurosystem.*

Motivation

- Market structure for clearing derivatives has implications for
 - Efficiency
 - Risk management
 - Systemic risk
- Current parallel structures
 - OTC derivatives – historically cleared bilaterally
 - Exchange traded derivatives – cleared through CCPs
- Clearing structures are rapidly evolving

Contribution of this paper

- There already exists related research and ongoing policy discussions regarding
 - Credit markets
 - Payments systems
 - Derivatives
- Derivatives clearing has been little studied
 - (Prior to this conference)
- This paper
 - Outlines the salient economic and legal issues
 - Analyses potential systemic risk and market implications of CCP versus bilateral clearing

Outline of talk

- What makes derivatives clearing special?
- Overview of
 - OTC clearing
 - CCP clearing
- Systemic risk under bilateral and CCP clearing
- Legal prerequisites to CCP clearing
- Progress on establishing legal framework
- What remains to be done?

Derivatives clearing is different

- Payments and securities clearing and settlement are completed in a few hours/days
 - Credit risk is introduced through system choices
 - Not inherent in the process
 - Uncertainty resolved quickly
- Derivatives contracts involve long term credit exposures
 - Transaction is not completed until maturity of contract
 - Credit risk cannot be separated from clearing process

Bilateral clearing

- Contract remains in force between original counterparties
 - Ability to exit contracts is limited
 - One or both counterparties are usually large dealers
 - Dealing is highly concentrated
- Collateral is used to mitigate credit risk
 - Primarily for dealer and inter-dealer exposures
- Positions are opaque
 - No central locus for systemic information

CCP clearing

- Original contract is replaced with (two) contracts with CCP
 - Offsetting contracts are automatically extinguished
- Credit risk mitigation is centrally managed:
 - Member credit screening/monitoring by CCP
 - Margins
 - Access to other member assets
 - Seat
 - CCP is common agent for pursuing legal claims
 - Efficient loss mutualization
 - Quickly attaching on-hand member assets
 - Backup commitments by members

Derivatives clearing and market structure

- Clearing effects market power of
 - Exchanges
 - Dealers
 - Efficiency
 - Easy of entry/exit from contracts
 - Liquidity
 - Costs of transacting
- Ongoing evolution reflects tension between
 - Preserving private advantages
 - Gaining public and private benefits

CCPs versus bilateral clearing

- CCPs clearly reduce likelihood of knock on failures.
 - Losses mutualized over entire member base
- CCPs are likely to reduce probability of market failures.
 - CCP is single relevant counterparty
 - Central monitoring of member credit worthiness
 - Ability of CCP to absorb losses is relatively transparent

CCPs versus bilateral clearing

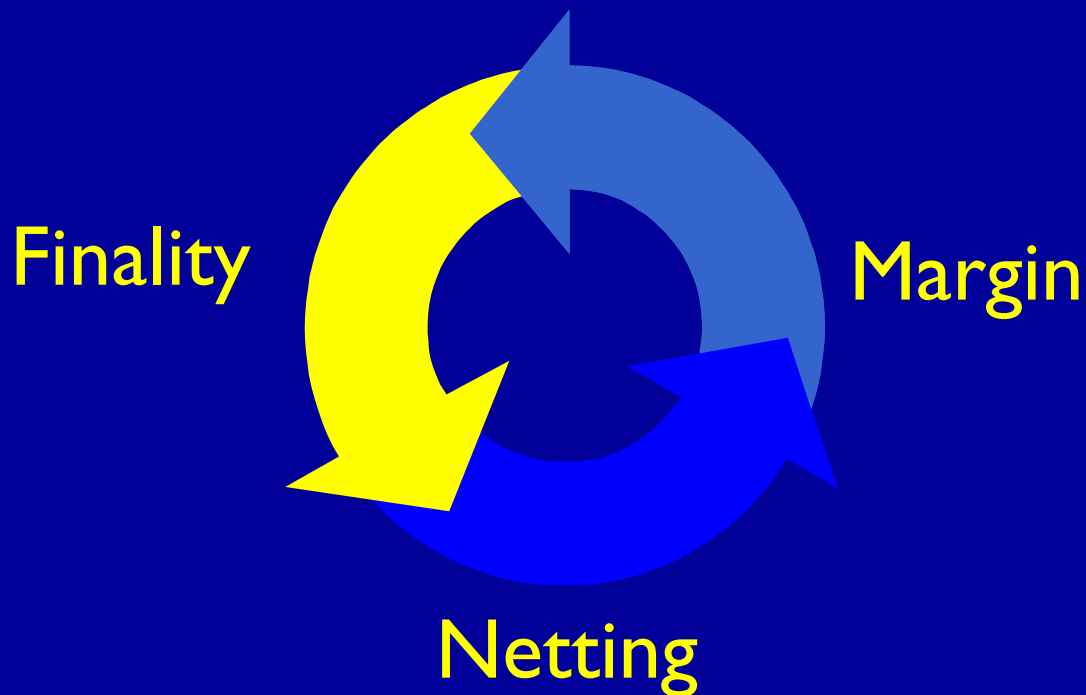
- CCPs may be marginally better at withstanding common shocks.
 - Wider loss-bearing and greater transparency help
 - May not avoid collapse for truly massive external shocks
- CCPs are themselves systemically important institutions
 - Their failure is potentially more disruptive than any single dealer's failure

Regulatory intervention

- CCPs' layers of loss bearing
 - Initial failing member
 - Other members
- Impose market discipline
 - Even if CCP itself is bailed out.
- CCPs provide a central locus of regulatory intervention
 - Central information re/ network of risk exposures
- Quasi-utility status of CCP may mitigate political risks of intervention

Legal foundations of a CCP

The following processes have to be protected from the effects of a member's bankruptcy by means of contracts and laws:



Alternative legal frameworks

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graph TD; A[Alternative legal frameworks] --> B[Novation]; A --> C[Open offer];
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Novation:

An existing contract is terminated and replaced by two contracts with the CCP

Open offer:

A contract is concluded with the CCP immediately after the matching of trading details

Novation and open offer

Both concepts achieve the same economic result: The CCP is the counterparty and manages contracts for as long as they are in force

With novation a bilateral contract existed at the beginning, so CCP rules should ensure that bilateral credit exposures cannot re-emerge.

With open offer, there are no prior bilateral contracts

Consequences of novation and open offer for contracts

The default affects the CCP's positions; the original non-defaulting counterparty's positions will not be closed, by contrast with a bilateral close-out agreement

The CCP – rather than the non-defaulting counterparty under a bilateral agreement – has to enter into new contracts following a default to address its consequences

Access to derivatives clearing

CCPs are considered quasi-utilities

CCPs must measure credit exposures

Essential facility theory may apply

Compute margin

Competition rules for open and fair access

Maintain financial resources

Operator's powers to rule on access are contained by competition and risk considerations

Netting and margin legal protection

European Union

- 1. Netting since 1998 in the EU Settlement Finality Directive (SFD);**
- 2. Margin/collateral since 2002 in the Financial Collateral Directive**
- 3. Communication on clearing and settlement (2004)**

United States

The Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 (BAPCA) for cross-margining and netting in derivatives clearing organisations is the most recent piece of legislation

Regulatory dialogue



European Union

**National authorities
authorise or recognise a
CCP under national laws;
some have designated
CCPs under the SFD**

United States

**CFTC or joint SEC-CFTC
registration for derivatives
clearing organizations**

**The Committee of European Securities
Regulators and the CFTC have
launched a common programme to
facilitate derivatives business, paying
particular attention to clearing**

What remains to be done?

Despite the development of standards, there are two issues to address:
1. Customer assets (issues identified since 1995)

Relationship between clearing members and their clients; treatment of client assets in the event of a member's insolvency

CCP's powers beyond netting and the realisation of margins after a member's insolvency

What remains to be done?

2. Cross-border issues

As regional hubs emerge in the EU, there is a need to consider an EU legal act dealing with risk management and competition

Consideration of multiple defaults or accumulation of market and credit risks with systemic risk implications

What remains to be done?

2. Cross-border issues

Conflicts of law arising as a result of foreign participants need to be assessed and monitored

Links between CCPs may help to manage conflicts of law

Regulatory convergence and cooperation are necessary (the example of the EU is particularly relevant in this respect)

- THANK YOU FOR YOUR ATTENTION