Exchanges and CCPs: communication, governance and risk management

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CCPs for exchange trades

- CCPs are expected to clear all the trades at exchanges
  - Assume obligations at the time of trades at exchanges
  - Participants are benefited from safe and efficient settlement services by CCPs
  - burdensome to remove a portion of trades in STP environment

- Many areas for CCPs and exchanges to communicate and cooperate
1) Exposure control

- It is practically difficult for CCPs that clear all the trades at exchanges to control or limit risk exposure.
- Exchanges should impose trading or position limits in a timely manner.
- Timeliness of data on positions is critical.
- Exchanges should be aware of CCPs’ risk management policy and measures.
2) Price movements

- Exchanges feed the information to CCPs for calculating participants’ exposure, preferably on a real-time basis.
- Price limits by exchanges sometimes useful for CCPs’ exposure control.
- Margin requirements by CCPs might have some impact on trades at exchanges.
3) Monitoring participants

- Many participate in both
- Information on creditworthiness based on periodical reporting and everyday contacts, liquidity availability, operational capability and patterns of trading positions is useful for both
- Also useful for orderly exit
- Avoid imposing redundant reporting burden
- Requirements could be different, but should be understood by both
4) Straight-through Processing

- Trade data obtained through execution process at exchanges are fed to CCPs
- Operational linkages between CCPs and exchanges
- Harmonisation of messaging standards, communication protocol and reference data
5) Financial resources...

- Some CCPs rely, even not primarily, on contingent claims to exchanges in the event of participants’ default
  - Parental guarantee by exchanges (when exchanges are parental organisations of CCPs)
  - Capital, retained earnings or reserves primarily allocated to exchange business (when exchanges and CCPs are within the same entity)

- Concerns over adverse (and systemic) impacts on exchange and conflict of interests
Interdependency

- The number of contracts: source of profits for both
- Exchanges depend on safe and efficient settlement services by CCPs
- CCPs depend on operational linkages and risk management measures offered by exchanges for less transaction cost and more prudent operations
Complementarity

- Trading or position limits (and price limits) are imposed by exchanges for CCPs’ risk control
- Margin requirements by CCPs help investors to avoid taking excessive risk at exchanges
- Monitoring cost (and reporting burden for participants) is reduced if they jointly monitor participants and share information
Conflict of interests

- Margin requirements: CCPs normally prefer prudent requirements, while exchanges are concerned they might overkill markets.
- Participation requirements: CCPs are likely to impose stringent requirements, while exchanges welcome broader range of participants as long as CCPs guarantee settlements.
- CCPs’ contingent claims to exchanges.
Demutualisation

- Demutualisation adds conflict of interests between shareholders and participants
- Shareholders try to allocate more financial resources under their control by asking for more contribution from participants
- Financial resources for risk management purposes should be explicitly earmarked
- Clear policies are needed on the contribution from shareholders for loss-sharing arrangements
Case: Osaka Stock Exchange

- Biggest exchange for equity index derivatives (Nikkei 225) and 2\textsuperscript{nd} biggest for cash trades of equities in Japan
- Also acts as the CCP for derivatives trades at OSE as an internal division
- Demutualised in 2001 and Listed on its own in 2004
An investment fund appeared as the biggest shareholder (10%) in March 2005, requesting cashout of reserves to shareholders.

Also requested to clarify the amount of reserves OSE should have for liquidity and loss-sharing arrangements in case of participants’ default.
OSE case shows...

- Demutualised CCPs should take more care of their financial structure
  - Shareholders try to maximise CCPs’ wealth under their control, sometimes by asking for more contribution from participants
  - CCPs’ retained profits could be utilised in the default procedure, but should be clearly earmarked and balanced with participants’ contribution
  - Most CCPs are not highly leveraged, but cost of capital is a factor to be considered in deciding how much earnings are retained for CCP business
OSE case shows... (2)

- Optimal degree of intimacy between CCPs and exchanges should be considered in designing governance structure.
- If a CCP and an exchange is within the same entity, easier communication and cooperation in some risk management measures (exposure control, margin requirements, monitoring participants) is a plus, but more severe conflict of interests might arise from difference in risk sensitivity between them.
## Intimacy with exchanges

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Optimal balance?

- Internal: good communication, but separate reporting line for CCP risk management and clear earmarking of financial resources is needed.
- Parental: good communication, but pressures to be more “exchange-friendly” are high.
- Balanced: CCPs’ independence is relatively high, but coordination cost for balancing interests of exchanges and participants is high.
Consolidation

- Serving more exchanges
- High level of independence for CCPs
- More efficient operation of CCPs
- More concentration of risk
- More coordination cost among exchanges
- Need to harmonise risk management measures
- Clear separation of financial resources or sufficient pooled resources to maintain adequate protection for every clearing service
Links

- Between exchanges / between CCPs
- Serving more exchanges
- More efficiency for participants
- Better monitoring from shared information (cost, participants’ position)
- Risks arising from links
- Need to harmonise risk management measures
- Clear policies to maintain adequate protection