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 2nd 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

Case: OSE (2)

- 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

Intimacy with exchanges	CCPs	Trades cleared
Internal	OSE (JP)	Derivatives
	CME	Derivatives
Parental	Eurex Clearing	Derivatives / Cash
	OCC	Derivatives
	JSCC (JP)	Cash / Derivatives
Balanced	LCH.Clearnet	Derivatives / Cash
	NSCC	Cash

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