Oxera

Agenda

Advancing economics in business

Counterparty clearing house user choice: an evolving European landscape

The market infrastructure for securities trading and post-trading (clearing and settlement) in Europe has been subject to significant change in recent years. What are the benefits of the 'user choice' model and interoperability between central counterparty clearing houses? Dr Robert Barnes, Managing Director, Equities, UBS Investment Bank, explains

During the financial crisis, business on exchanges with counterparty clearing houses (CCPs) performed well. This included markets such as SIX Swiss Exchange and the London Stock Exchange (LSE), which feature the interoperating CCPs of LCH.Clearnet and SIX x-clear where users (ie, brokerage houses) clear through their CCP of choice.

In 2010, the new 'user choice' model (ie, trading platforms offering participants the ability to clear through multiple CCPs) enabled by CCP interoperability appears to be becoming the rule rather than the exception. This emerging EU landscape, while appearing to fragment as more CCPs interoperate, in fact allows individual firms to consolidate their respective pan-European market flows into a single CCP of their choice to scale benefits.

The commercial imperative

In recent years, while exchange and post-trade costs per trade seem to be declining on a per-transaction calculation, if one translates these fees into a proportion of value traded, it becomes apparent that the trend of shrinking order book trade size in many markets, year on year, means that the relative cost of

Table 1 LSE order book: increasing number and value of trades, lower average trade size

	Order book average size (£'000s)	2008 vs 1999	*2009 vs 2005*	Number of trades (m)	2008 vs 1999	*2009 vs 2005*	Value traded (£ billion)	2008 vs 1999	*2009 vs 2005*
2009	**7**		**Down 2/3**	**148.4**		**Up 3×**	**1,025**		–3% ~flat
2008	**10**	**–84%**		**186.6**	**Up 35×**		**1,883**	**Up 6×**	
2007	15	August deleveraging: November MiFID		134.0			1,998		
2006	19			78.2			1,515		
2005	**20**			**51.4**			**1,052**		
2004	21			40.8			875		
2003	22			32.9			715		
2002	28			23.8			671		
2001	41			15.8			650		
2000	62			8.6			531		
1999	**63**	**Peak of Internet bubble, FTSE 100**		**5.4**			**339**		
1998	59			3.6			210		

Source: www.londonstockexchange.com: factsheets and news.

Selected background to the debate on the infrastructure for trading and post-trading of securities

'CCP services could—and probably should—operate in a competitive environment provided issues of interoperability are overcome.'

European Commission (2006), 'Competition in EU Securities Trading and Post-trading: Issues Paper', May 24th, p. 2. Note: Since 2003, interoperability precedent existed between LCH and x-clear, introduced by the Swiss Exchange Swiss blue-chip and pan-European market offerings via virt-x.

'On 7 November 2006, trading and post-trading infrastructures signed the Code of Conduct on clearing and settlement. The Code aims to enhance transparency and increase competition in the post-trading sector.'

European Commission: The EU Single Market, 'Monitoring Group of the Code of Conduct on Clearing and Settlement', available at http://ec.europa.eu/internal_market/financial-markets/clearing/mog_en.htm.

Federation of European Securities Exchanges, 'Code of Conduct for C&S'.

Available at http://www.fese.eu/en/?inc=cat&id=19.

July 16th 2009: the Oxera study, published by the European Commission, on trading and post-trading costs, highlights the following:

- costs per transaction are decreasing; shrinking trade size can bias this metric;
- costs of cross-border transactions are still multiples more expensive than domestic ones;
- 'To become an effective tool, further reports need to reflect also post-trade costs as a proportion of the respective value-traded—as this is what impacts investors.' European Commission (2009), 'Financial Services: Commission Publishes Study on Trading and Post-trading Prices, Costs and Volumes', press release IP/09/1511, July 16th.

Oxera (2009), 'Monitoring Prices, Costs and Volumes of Trading and Post-trading Services', report prepared for European Commission DG Internal Market and Services, July. Available at www.oxera.com.

October 21st 2009: 'Call to Action: Exchanges, Clearing, Settlement to Improve Tariff Transparency' at IEA European Exchanges Summit. Users request improved invoice information to calculate basis point comparability, particularly of post-trade fees, consistent with the Code of Conduct.

February 2010, AFM (Netherlands), DNB (Netherlands), FINMA (Switzerland), FSA (UK) and SNB (Switzerland) issued a joint statement broadly supporting interoperability following a prudent review of the potential for systemic risk that might arise from multiple interoperability relationships for cash equities CCPs. The qualifying actions are on CCPs to revert to the regulators with respective proposals for extra collateral to cushion scenario risk. Existing arrangements (ie, LCH.Clearnet and SIX x-clear), which performed smoothly during the largest crisis in the history of the capital markets, are allowed to continue and amend terms in the background to conform with the review.

trading to process the same level of client flow becomes more expensive.

The UK order book segment traded via the LSE is the largest single-country pool of liquidity in Europe and provides a prime case study. Table 1 presents the number and value of trades on the LSE over time, and shows that the average order book size fell by around 85% during the period 1999 (at the peak of the Internet bubble) and 2008, and by two-thirds between 2005 and 2009.

Progress and proliferation of cash equities CCP 'user choice'

As brokers compete to provide faster execution, reduced market impact, and better results for end-investors, the consequence for order books is a trend of an increasing number of trades and lower average trade size. Depending on tariff structures, particularly those correlated with number of transactions, the growth in numbers and thus fees is outstripping growth by value. This is particularly the case for the post-trade tariff models. The result can be that brokers processing the same value of client flow can face increasing costs of processing that flow year on year. This profitability impact is under scrutiny on the sell side.

Clearing and settlement are now priority themes for trading floors. The 2008 Lehman default dramatically highlighted the differences between markets that have and do not have CCPs. The result: an imperative to introduce CCPs for markets that do not have them—for example, NASDAQ OMX Nordics launched a mandatory CCP in October 2009.

On December 12th 2008, UBS was the first broker to go live with the CCP user choice model via the LSE—UBS switched clearing to SIS x-Clear.[1] The beauty of this model is that benefits are available to those that elect to switch CCP, yet those that wish to remain are not forced to change. This competition encourages providers to remain nimble on fees and functionality.

For the first time, international users can consolidate clearing across markets with a choice of CCP that has the best affinity with a user's commercial profile without imposing switching costs on those domestic members that wish to remain with the incumbent.

The landscape map presented in Figure 1 summarises the current position of CCP competition in an increasingly fragmented post-MiFID (the Markets in Financial Instruments Directive, which came into effect on November 1st 2007) Europe.

Reading the landscape map

Down the left-hand side are the CCPs that serve more than one EU market, listed alphabetically.

The blue boxes include live dates, where available, from a functional readiness potential. After the February 2010 announcement by several regulatory authorities (see box on p. 2), some models may require more time before launching due to additional regulatory review of the new interoperability proposals.

Across the top, separated by vertical lines, are as follows.

- Exchanges and multilateral trading facilities (MTFs) ranked from left to right by largest number of trades using Federation of European Securities Exchanges (FESE) July 2009 year-to-date statistics. The more blue per row, the more markets that can be consolidated by that CCP, with higher weightings of fee-saving potential where blue boxes cluster to the left: today CCP fees correlate more with number of transactions than value processed. In fact it is this fixed-cost-per-ticket aspect of CCP tariffs in an environment of shrinking trade size that increases basis point costs to brokers as brokers process the same value of client business. Added to the CCP chart are average trade sizes measured in €'000s (€k) per trading platform. So with average trade sizes for Chi-X at €6k/trade and Deutsche Boerse at €12k/trade, broadly it requires two trades on Chi-X to process the same value as one trade on Deutsche Boerse; this affects the comparative clearing costs associated with Chi-X.
- EU third-party dark pools.

Figure 1 The current state of CCP competition

EU cash equities
CCPs at February 2010

Largest number processed on order book → smallest
FESE order book year-to-date July 2009

Trading [Settlement CSD]	UK LSE [Euroclear]	Fr Be Ne Po NYSE Euronext [Euroclear]	pan-EU MTF Chi-X MTF	Germany Deutsche Börse [Clearstream]	Italy Borsa Italiana [Monte Titoli]	Nordic Swe Fin Den et al. NASDAQ OMX Nordic [VP/Euroclear]	pan-EU Turquoise MTF *[now LSE JV]*	Switzerland SIX Swiss Exchange [SIS]	Spain BME [Iberclear]	pan-EU BATS Europe MTF	Norway Oslo Børs building CCP Q110[VPS]	pan-EU inc Nordic NASDAQ OMX Europe MTF	Ireland Irish Stock Exchange [Euroclear]	Nordic Burgundy MTF
FESE rank by number of trades	1	2	3	4	5	6	7	8	9	10	11	15	18	21
FESE rank by value traded	2	1	5	3	6	8	9	7	4	11	10	15	18	19
FESE order book €k/trade	**8**	**8**	**6**	**12**	**9**	**10**	**6**	**15**	**28**	**5**	**10**	**4**	**7**	**7**
Multi-market CCPs														
CC&G	tbc				**live**									
EMCF			**live**			**live**		tbc		***live**		**live**		**live**
Eurex Clearing				**live**				Q210					**live**	
EuroCCP						Q110	**live**							
LCH.Clearnet **Ltd**	**live**		Q110				Q110	**live**		*	tbc			
LCH.**Clearnet SA**		**live**												
Oslo Clearing											Q210			
SIX x-clear	**live**	tbc	Q110	Q210		Q110	Q110	**live**		*Q110		Q110		Q210

Trading [Settlement CSD]	*Third-party non-displayed pools* *pan-EU dark* *NYFIX Euro Millennium [now NYSE Euronext]*	Swiss dark Swiss Block	pan-EU dark Liquidnet	pan-EU dark NYSE Euronext JV SmartPool	UK and later pan-EU PLUS Markets PLUS-pool	pan-EU dark *LSE Baikal…tbc post-Turquoise deal*	pan-EU dark Pipeline	OTC Client matching Omgeo DTCC & ThomsonReuters JV	Securities lending NYSE Euronext JV SecFinex	*Not FESE-ranked* pan-EU ex Fr Be Ne Po NYSE Euronext Arca EU MTF	pan-EU Equiduct Börse Berlin	pan-EU Quote MTF
CC&G												
EMCF										tbc		**live**
Eurex Clearing												
EuroCCP				^live			tbc	Q110	#Q4	**live**		
LCH.Clearnet **Ltd**		**live**			**live**					tbc	** live	
LCH.**Clearnet SA**				^live					# live		** live	
Oslo Clearing												
SIX x-clear	*live*	**live**	**live**	Q110				Q110	# live	Q110	** live	Q110

* BATS Europe: LCH only UK & Swiss names Q409 on BATS; EMCF and x-clear cover all pan-EU names.
** Equiduct: LCH only UK; Clearnet=French Dutch Belgian Portuguese; x-clear German + Swiss names on Equiduct.
^ Smartpool: Clearnet=French Dutch Belgian Portuguese; EuroCCP=Austria, Denmark, Finland, Germany, Ireland, Italy, Norway, Sweden, Switzerland and UK live on SmartPool.
# SecFinex: Clearnet=French Dutch Belgian Portuguese: live; EuroCCP only UK & x-clear=Austria, Denmark, Finland, Germany, Norway, Sweden and Switzerland Q409 on SecFinex.

Source: AFME, CCPs, exchanges, FESE, MTFs, SecFinex, and public reports.

- SecFinex Securities Lending platform majority-owned by NYSE Euronext.

- New entrants not yet ranked by FESE.

Burgundy and Quote MTF are planning to start with EMCF and add interoperable CCPs later; Ireland uses a separate instance of Eurex Clearing.

Benefits of user choice for CCPs

In general, we prefer organic market solutions to those imposed by prescriptive regulation. The commercial benefits of the user choice model are multiple and manifest.

- Introducing a CCP with netting for bilateral markets saves significant central securities depository (CSD) settlement fees: one only pays per CCP net stock position rather than per gross trade, resulting in fewer CSD settlement transactions.

- Plugging in once to a CCP that serves multi-markets effectively gains access to the remaining oncoming markets 'for free'.

- Competitive clearing via the model encourages incumbents to cut fees pre-emptively (eg, as we have seen ahead of live dates for new entrant CCPs).

- Different firms may have an affinity for different CCPs based on, for example, respective order execution profiles. Firms are not forced to bear switching costs—they have the freedom to choose to do so.

- Competitive clearing giving firms the opportunity to consolidate their multi-market flows onto a single (or fewer) CCP(s) of their choice has two further advantages:

  - where a CCP has a volume discount, incremental flow across names and markets saves significant CCP fees;
  - where a single name trades on multiple platforms with different CCPs, consolidating to one CCP saves settlement fees. For example, if VOD (Vodafone) trades on LSE&x-clear + Chi-X&EMCF + Turquoise&EuroCCP, there are at least three times net settlement fees/VOD, reflecting three CCP net messages to the CSD. Once a single CCP x-clear cross-nets all of VOD trades via LSE Chi-X Turquoise, two-thirds of the settlement costs will be saved.

With average order book trade sizes ranging from €4k to €28k on the CCP side, it is clear that focusing on a cost-per-trade metric can lead to spurious conclusions; the better basis point calculation enables more meaningful 'apples-to-apples' comparisons. The European Commission is helping with the critically important Code of Conduct tariff transparency by expressing support for the basis point metric. Users encourage trading and post-trading providers to include value-traded statistics on respective fee invoices.

Complemented by MiFID access provisions, the Code of Conduct voluntarily signed by exchanges and post-trade entities should provide tariff transparency, encourage meaningful competitive new entry, and serve as a tool for users to escalate concerns to European regulators for 'adult supervision' if an incumbent attempts to frustrate meaningful pro-competitive new entry.

Users care about the success of this Code of Conduct because it embodies the principle that the industry can reform itself. However, there are three requests to improve the Code for cash equities.

(i) Tariff comparability on basis points as well as cost per trade

Tariffs remain too complex for 'apples-to-apples' comparisons. At the very minimum, exchange and post-trade invoices should include basic information on the amount of fees and both the associated values traded and the number of trades processed. Where providers have implemented tariff changes or discounts, it would be helpful, and in the interests of the provider to garner user goodwill, if these were similarly itemised.

(ii) User endorsement as a business filter for interoperability requests

Today it seems that many providers are filing multiple access and interoperability requests to test the ability of the Code. Commercial logic suggests securing user endorsement first to serve as a business filter in order to minimise frivolous requests.

(iii) Timetables to allow competitive new entry need to move faster

Technically, most interoperability projects and the act of switching are straightforward to implement. Incumbent delay tactics disadvantage market efficiency by preventing access to the obvious benefits of multi-market post-trade consolidation via the user choice model.

Helpfully, since domestic regulators issued the joint statement in February 2010, it is up to CCPs to act for users requesting meaningful choice, and this is under way. The call is for CCPs to implement pan-European interoperability as soon as possible to mitigate the trend of frictional costs rising faster than value traded, and leverage scale benefits to encourage liquidity that is important at a time of post-crisis recovery.

Robert Barnes

[1] finextra.com (2008), 'UBS to Switch Clearing to SIS X-Clear', December 3rd, http://www.finextra.com/fullstory.asp?id=19382.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

Other articles in the March issue of *Agenda* include:

- **a potential new regulatory framework for Britain's energy networks?**
  Hannah Nixon, Ofgem
- **fine to pay? when firms cannot afford to pay the European Commission's penalties**
- **is net neutrality not neutral?**
- **standardising communications messaging: improving trading and post-trading activity**

For details of how to subscribe to *Agenda*, please email agenda@oxera.com, or visit our website

www.oxera.com