Crowded trades a risk in clearing houses

By Philip Stafford

Are clearing houses overlooking the risks around crowded trades? A new academic paper suggests investors’ positions are far more exposed in turbulent markets than they realise.

It may seem that most studies around clearing house risk have been debated – if not resolved – in the last few years.

But the new study published today by Albert Menkveld, professor of financial economics at VU University and Duisenberg School of Finance in Amsterdam, reintroduces a forgotten one.

He explores his “intuition” that losses in members’ portfolios become correlated when their trades crowd on a single security or risk, and that asset has an unexpected jolt.

As he notes: “All else equal, if all traders trade a single security or risk factor, a clearing house is more likely to experience multiple trader default.”

His conclusion – that crowded trades do turn out to be hidden risk as they don’t show up in individual traders’ portfolios – restarts an issue that has curiously been pushed to the sidelines after the financial crisis.

The mantra from lsoic and G20 regulators has, rightly, been that clearing houses monitor their exposures to participants and control it through margin requirements on a member-by-member basis.

Mr Menkveld has advised the European Securities and Market Authority (Esma), the regulator, and the French Autorité des Marchés Financiers. Last year he used ultra-high frequency information to dispute the official version of the 2010 Flash Crash.

In his latest study he took data for equity trades in Denmark, Finland and Sweden reported to European Multilateral Clearing Facility, the region's main clearing house, between October 2009 and September 2010. That covered trading on Nasdaq OMX, Chi-X Europe, Bats, Burgundy and Quote MTF. He also took the margin totals EMCF required each member to post daily.

In that period the daily aggregate margin in EMCF was around €150m. However, on two days, April 26 and May 10, that total shot up to around €500bn. Those two peaks corresponded to two events, respectively the eurozone and IMF bailing out Greece and a first-quarter earnings miss by Nokia, the mobile phone maker.

To protect itself from such a substantial jump, perhaps the clearing house could charge more when members’ trades crowd. Here Mr Menkveld created a new margin methodology to consider the scenario and came up with two more findings.

First, EMCF was far less capitalised than perhaps it should have been. Under his calculations, the margin required on the “Greece news” day would have soared by another €236m to €747m. The total ‘Nokia’ margin should have risen by €149m to €644m.

Secondly, some clearing members paid far less – with one example €100m short – than they should have. Others paid too much.

The discomforting part of this study is that it covers equities, a cash product normally settled in a couple of days. Compared with derivatives, the systemic risk is minor.

Mr Menkveld’s theory is now available for others to evaluate. But it opens up the issue of what happens in a clearing house if many clearing house members all experience the same price shock simultaneously.

At worst, the clearing house potentially might have to cover losses on many portfolios at the same time. If the customer is clearing several asset classes in the same clearing house, the position may have been netted off by other positions in futures, for example. But a clearing house processing a single asset class, such as equities, would not be aware of offsetting positions.

It’s difficult to know if it is alarmist since this issue rarely comes up in debates. Since the financial crisis only a few parties, notably
the CFA Institute, have raised it. Mr Menkveld does everyone a service in bringing it back to the table.

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