

Central clearing for OTCs: Schlieffen Plan redux

The global headlong rush towards CCPs, far from reducing systemic risk, may actually accentuate it, argues Thomas Krantz.

CENTRAL counterparty (“CCP”) clearing of financial instruments is hardly a matter of war and peace. But given the calamitous socioeconomic role played by OTC derivatives in the financial crises that began to unfold across the world in 2007, the G20’s central strategic proposal – based upon the September 2009 Pittsburg declaration¹ – to mitigate these risks deserves careful review.² To do so, a comparison with one of history’s most rigorous military plans might not be out of line – perhaps it is reflecting on World War I as the centenary of its outbreak approaches that leads our minds in this direction.

Before turning to financial matters, the Schlieffen Plan³ merits explanation. The authorities charged with German defence had to respond to the country’s historic geographical dilemma of being in the middle of Europe: At almost all costs, a successful strategy would require the military’s resources not being split between east and west. And so in the years before World War I, the nation’s best thinkers put their minds to it.

The plan assumed that France was weak and could be beaten quickly, and that Russia was much stronger, but would take longer to mobilise its army.

At the outbreak of World War I, the plan was put to the test. It began to go wrong almost immediately. On 30 July 1914, Russia mobilised its army, but France did not. Germany was forced to invent a pretext to declare war on France four days later.

Execute regardless

Matters deteriorated further when Britain declared war on Germany the following day because, in a Treaty signed in 1839, Britain was committed to defend Belgium. German men and materiel were mostly east of the Rhine and were readied for movement to the west, famously with a massive concentration set to cross the river at Cologne over a single railroad bridge – at a time when few crossings existed. Despite the unexpected opening of the war, the Schlieffen Plan had to be executed because, well, that was the plan.

We cite Schlieffen in the context of the G20’s strategic defence of the global financial

system not to criticise the G20; we simply state that strategy will only be effective when it can be properly executed, and the logistics and resources mobilised for the operation suit the needs.

We will now turn to over-the-counter (OTC) derivatives and consider the G20's three-pronged plan, especially as it affects CCPs, the market infrastructures we know well.

Profound change

A little over two years ago, UK advisory business Thomas Murray was approached by six global banks to review the changing landscape for central counterparties to financial transactions. Following the G20 instruction in Pittsburgh, by late 2011 laws and regulations were already written, or at least well outlined, and one could see that central clearing – like much else in financial services – was about to undergo profound change.

The “concerned” banks asked us to learn what we could about where the CCP segment might be going, and what the regulatory changes might mean for business planning as well as for these firms' capital requirements.

Apprehensive

Our team of experts set about doing just that. With ourselves at the helm, the “concerned” banks formed into a working party and were quickly joined by SWIFT, and the public documents and opinions of key global and national authorities were sought and included.

The research addressed six broad risk components: counterparty; treasury and liquidity; asset safety; financial; operational,

and governance and transparency. The final result of this enquiry and market cooperation is an exceptionally comprehensive and detailed set of data and analyses.

What we gleaned from all this research makes us apprehensive about the new responsibilities CCPs are being asked to assume in order to accommodate privately traded financial contracts. It is unclear that these small institutions are fit for this purpose. Most have worked well, indeed very well, for assuming counterparty risk in cash securities, options, and futures, that are listed and traded on exchanges – but OTC is something else.

Is there an echo in this of Schlieffen? Is channelling so much of the OTC contract counterparty risk into regulated CCPs the financial equivalent of that single railroad crossing over the Rhine, where men and materiel had to be “cleared” and sent west 100 years ago?

Default risk

During the course of the research some 85 CCPs have been identified. Our coverage for now is 27 institutions and includes nearly all of the largest clearing houses around the world – the ones most likely to cause a disruption to the financial system if a default were to occur.

The default risk is real: The International Organisation of Securities Commissions (IOSCO) global risk assessment released in October 2013 cited CCPs as one of four central concerns for potential disruption of the world's financial system in the year ahead, and declared CCPs another category of financial institutions which are “too big to fail.”

Given their modest size, an alternative way to state this is that CCPs are too central to capital markets operations to be allowed to fail. Whilst our efforts, and those of the “concerned” banks, together with SWIFT, have resulted in a great deal of information on central clearing in a standardised format.

Depth of field

It remains to be said that there is much of fundamental importance about this segment which we and our research partners do not know. To the best of our knowledge, no one else has put together answers to these questions in a world-wide, systematic way, either.⁴

To start, we do not know how many employees work in the world’s CCPs. Many of them are legal structures for which the work is done by employees on contract elsewhere in the business group – for example, in a dedicated business department. Those CCPs that do have staff are often small, sometimes only a few dozen employees. That is all that has been required.

Like the exchanges they complement, CCPs are skewed and the few largest have hundreds of employees. In terms of the number of persons honed in the complexities of clearing risk management as the asset mix changes, well, we do not have a figure for that, either.

Solidity or fragility

There cannot be many of them – perhaps a few in each clearing house. We therefore suppose that there is expertise concentration in the hands of a few dozen persons at most. Similarly, we do not know what the clearing segment’s capital base is.

Two very large institutions, the Chicago Mercantile Exchange and Korea Exchange, have their clearing business contained within the trading company. There is no separate balance sheet.

Without a figure for capital set aside for central clearing, we cannot know what resources are available to withstand shocks – although clearing houses usually (but not invariably) are set up with guarantee funds and “waterfalls” of additional funding to run through as the lines of first defence in case of default, notably the margin posted by clearing members.

Diversity

Without that overall capital base for the segment, we do not know how profitable this business might be. From our individual analyses, we note that this is entirely variable: Some CCPs have been set up as profit centres; others merely to clear trades at minimal fees that might not be in proportion to the business risks being run.

There is no consistency. That should not be surprising, given that clearing houses were founded and grew up in the specific circumstances of agricultural futures trading, were found to be useful for financial derivatives as from the 1970s, and of general utility to the exchange sector in the decades that followed.

Each is local in spirit, built for the circumstances in which it was established; when the analyses are set out side-by-side, they are a disparate community.

Little is written by clearing houses on the investment policy of their equity or the margin held to secure clearing member positions. CCPs are at all times vulnerable to

liquidity problems: Can the assets deposited be turned to cash immediately; or, if not, over what period of time?

It is well and good for regulation to mandate levels of available liquidity, but over the past six to seven years we have witnessed even the most actively traded asset classes freezing, notwithstanding central banks' epochal distributions of cash.

Margin unknowns

The research has not been able to unearth consistent information on margin methodology, the formulation of requests to trading counterparties for assets to offset the risk inherent in the trading position the CCP is assuming.

How much margin is to be handed over to the clearing house? What is the quality of those assets? What are the open positions in the market for the asset classes the clearing house has taken on its books? We cannot calculate on an industry-wide basis the ratio of default fund to initial margin, yet that information is central to understanding the level of risk mutualisation.

Pricing problems

The difference between centrally clearing an exchange-listed and traded product and an OTC instrument is how the price is formed, the transparency of the process, and the breadth and depth of participation. It is a different matter for a CCP to try to find prices in OTC, because by definition there is no organised market for those contracts.

When it clears OTC, it must take the price from the participants only, with inherently less certainty, in particular when it comes to stress testing the effects of potential

adverse market movement. We would think it is especially important to understand the hypotheses underlying those tests for this category of assets. Finally, among the critical pieces of information missing, we must cite the question of resolution and recovery of a failed CCP. We have gathered some pieces of information, but not found more.

Where does this leave the G20 plan for OTC derivatives? Is the forceful channeling of "standardised" OTC instruments into central clearing the right way to solve OTC risks? The Pittsburgh Declaration could not have been clearer: This is about OTC being pushed in various ways toward forms of regulation.

Why?

But why CCPs, which are structured for the public exchange environment? How did this come about anyway? Who gave heads of government the idea of reshuffling the risks in this manner? CCPs have never especially been on the public radar screen, though they were being followed episodically by the Group of Thirty, and later by the Committee on Payment and Settlement Systems at the Bank for International Settlements and IOSCO.

In the autumn of 2009, to the best of our recollection and knowledge, CCPs in their majority were not volunteering to take this work on. Nor was it considered a coup to have this new flow of business coming through.

Is there a back-up? Returning to the Schlieffen Plan example and the abrupt discovery that the military needed to reverse the direction of trains going over that bridge in the face of unexpected circumstances, is the

financial sphere about to be confronted with an analogous situation?

Is OTC risk being “massed” for transfer into CCPs, as those troops and materiel were in Cologne one century ago? Clearing “standardised” OTC contracts has and will continue to lead to risk reduction, supposing there can be a common global understanding of what “standardised” is.⁵

Why not on exchange?

We wonder about the extent to which standardisation is even the issue: This seems to be a distraction from the difficulties of pricing risk, which to us is the key factor – and it is harder to do so without the interaction that comes from broad public involvement on an exchange, not easier. If products can be “standardised,” then why are they not listed and traded on an exchange anyway?

Concentrating risk in CCPs may make them fragile. Clearing houses can protect themselves in “normal” trading conditions, but only if the OTC trade price reported to the CCP is valid and the corresponding margin remains liquid.

Then there is the problem of rapid-fire trading, meaning that risk positions are being modified at high speed throughout the trading day. How is one to request and receive margin, that essential asset that secures the system, when microsecond changes in counterparty positions are occurring? This affects all CCPs.

Fragmentation of data

As to the other parts of the G20 strategy, if these contracts come to be traded on exchanges as well as other platforms, the liquidity required to find prices gets split.

Also, trade reporting looks set to scatter massive data in varying formats across many repositories, making it hard – if not virtually impossible? – to see how they can be reassembled into a coherent picture of counterparty positions, at least for the foreseeable future.

Regarding additional capital requirements for OTC contracts that are not centrally cleared, this might be an invitation to transfer as much trading as possible to jurisdictions able to be less costly. We wish this were not the case.

From the words of the Pittsburgh Declaration and the public discourse that followed, the expectation is one of near elimination of OTC risk, to be accomplished by sending some trades to CCPs, reporting everything, and adding capital requirements for non-cleared OTC instruments.

We are not sanguine that these approaches will work.

Right goals, but....

The strategic goal of reining in OTC derivatives is laudable and necessary for protecting the world’s financial system. G20 has got that right.

Yet the G20’s request of using CCPs as part of the solution strikes us as odd. It prods the world’s CCPs, regulated institutions that have worked well to date, to remake themselves in order to accommodate risks being generated outside the regulatory perimeter.

This is not a comfortable fit. In our view, if two parties have a commercial justification to go outside the thousands of available publicly traded contracts, with their associated central clearing, and wish to take a position or cover a risk by dealing off-exchange,

which should be perfectly acceptable, provided that they alone assume the risks of doing so.

These positions should then be notified to capital markets and bank authorities in a way that the home country supervisors can summarise the counterparties' global net exposures.⁶

Incomprehensible results

This G20 strategic response to the OTC problem, by pushing it part-way into the regulated perimeter of capital markets, looks like a poor match for doing more than netting out a portion of the OTC risk, the "standardised" parts, while scattering most of the price information across a multitude of differing platforms for some trading and diverse forms of reporting.

In 2007-2008, the essential problem was information about what was "out there" and what it was worth – the G20 approach does not seem to us to advance in getting a comprehensive overview of OTC.

Adapt to flourish

As 2014 progresses, we are no longer theorising about what to do. The G20 plan was put forward several years ago. Legislation and regulation have been drawn up, and the financial services industry is advancing into plan execution.

We trust that the authorities and market participants will remain adaptable: Let us remember Schlieffen and the many other superbly crafted plans, all of which always needed to be adapted to circumstances.

Let us also watch over CCP risk profiles – these are central market infrastructure institutions, and they must be kept robust for

the work they have performed well historically for regulated marketplaces. We strongly request that the clearing house risk managers themselves be the persons who choose what trades to take on, and how: They must be confident of the quality of the assets being introduced onto their balance sheets, their ready liquidity and their pricing. •

Endnotes

1. Pittsburgh G20 Summit Declaration, September 2009: "Improving over-the-counter derivatives markets: All standardised OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared contracts should be subject to higher capital requirements." – G20 Communique.
2. The Bank for International Settlements' Triennial Central Bank Survey on "Foreign exchange and derivatives markets," published in December 2010, cites on page 2 "extreme growth in OTC derivatives" in the period 2007-2010. And it continued, "... Despite the Crisis-related declines [in asset values], positions in the OTC derivatives market went up in the three years since the last survey. Notional amounts outstanding of such instruments reached US\$583 trillion at end-June 2010, 15 per cent higher than the level recorded in the 2007 survey. This corresponds to an annualised compound rate of growth of only 5 per cent, however, compared to 32 per cent annually in the period 2004-2007, and it is also clearly below the roughly 20 per cent average annual rate of increase between 1995, when position in OTC derivatives were first surveyed by the BIS, and 2007." In the December 2013 BIS triennial survey, growth resulted in an outstanding notional figure of US\$693 trillion, the efforts of G20 to restrain these markets notwithstanding. To give some perspective, the CIA World Factbook shows estimated world Gross Domestic Product in 2012 at US\$72 trillion

in current dollars.

3. Schlieffen Plan, 1914: "A plan intended to ensure German victory over a Franco-Russian alliance by holding off Russia with minimal strength and swiftly defeating France by a massive flanking movement through the Low Countries, devised by Alfred, Count von Schlieffen (1833–1913) in 1905." – Collins Dictionary.

4. The Financial Stability Board's "OTC Derivatives Market Reform, Third Progress Report on Implementation," 15 June 2012 states that "...Nevertheless, incomplete currently available data means the level of standardisation in the market, and the extent to which it is increasing, can only be roughly estimated." The more recent report in this series, dated 2 September 2013, did not address this point. But it was clear by September 2013 that the deadline of end-2012 for implementation of reforms as set in the Pittsburgh meeting had been missed.

5. A commonly accepted definition of "standardised" remains to be developed. That is not so different from other frequently used terms in the capital markets, most

notably the concepts liquidity and market depth. That would not be problematic, but for the point that under the new rules of trading what is standardized is meant to be centrally cleared. It seems to us that this will remain a matter for the observer to judge.

6. Such a reporting obligation may appear to be onerous, but then one must recall that many financial institutions heading into these crises were unable to understand, manage, or communicate their risk positions, either.

Editor's note

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