Rethinking the Cost of Clearing: Capital Standards Weigh on FCM Business Models

By Will Acworth

For the past several years, the business of clearing derivatives has undergone tremendous change as derivatives market regulators such as the Commodity Futures Trading Commission have implemented the Group of 20 reform agenda. Now the other shoe is about to drop.

Banking regulators are putting in place a new set of international capital standards aimed at strengthening the banking system's capital base. One consequence is that the cost of providing clearing services will rise dramatically over the next several years. As a result, executives at several major clearing firms say they are now undertaking a fundamental reassessment of their business models.

"2014 is going to be the year of the capital bite," said Jerome Kemp, global head of futures and OTC clearing at Citi. "The industry as a whole will wake up to the impact of the new regulatory and capital standards and will need to respond. It's an exceptional challenge that will require dramatic changes to the revenue model that derives this business forward."

Capital Charge

Historically the clearing business was viewed as a low-risk activity by banking regulators. Under the previous set of capital standards, known as Basel II, the methodology for calculating capital charges generally treated cleared contracts as posing relatively little or no risk to an individual bank's financial health.

That is now changing. The Basel Committee of Banking Supervisors, the international body that sets capital standards for banking organizations, has developed a new set of standards aimed at reducing the potential for another crisis. These standards, known as Basel III, will require banks to set aside more capital for counterparty risk in cleared derivatives, including both futures and swaps. This includes their contributions to default funds as well as the notional value of the customer positions that they clear. Cleared derivatives also will have to be added into a separate set of capital requirements based on leverage ratios, adding further to the capital cost of clearing.

The new capital standards are extremely complex and many aspects are still under development, but bankers who have analyzed the potential impact say that the cost will be several orders of magnitude larger than the cost of compliance with market reforms such as Dodd-Frank. More importantly, these are not one-time requirements; the capital charges will be a permanent addition to the cost of running the business.

One consequence may be that the number of banks committed to running a global clearing business may decrease in the coming years, according to Michael Yarian, head of agency derivatives services at Barclays. "The clearing business will consume considerably more financial resources under new regulations," commented Yarian. "The current economics for providing these services will not drive acceptable returns in the new world. Either the economics will need to change or you will have a consolidation amongst clearers."

Default Fund Contributions

One aspect of the standards that is especially worrisome to clearing firm executives is the capital charge for contributions to clearinghouse default funds, which is part of the proposed revisions to the risk-based capital requirements that came out in June. While the details of the calculation method are complicated, it appears that the capital requirement could equate to an amount equivalent to 100% of contributions. In other words, if a bank contributes $20 million to a default fund, it would have to raise an additional $20 million in capital.

This strikes many clearing industry executives as a gross over-estimation of the actual risk of loss. They argue that a default fund is not the first line of defense; before that money is used the clearinghouse works through the defaulting firm's margin and default fund contribution as well as its own contribution to the default fund. LCH.Clearnet was able to resolve Lehman's bankruptcy without tapping its default fund, and CME has never tapped into its default fund at any point in its history.

Furthermore, the dollar-for-dollar capital charge for all contributions to all clearinghouse default funds assumes that all clearinghouses would undergo a default at the same time. As several industry organizations have noted in their responses to this proposal, such a scenario seems quite unlikely.

The imposition of this new capital charge comes at a particularly challenging time. Clearinghouses worldwide are moving to increase the size of their default funds to meet a separate set of financial market infrastructure standards set jointly by the Basel Committee and the International Organization of Securities Commissions. This can be achieved in various ways, but typically it includes an increase in member contributions. The paradoxical result: a higher capital charge for members under the risk-based capital standards.

That's not all. If a clearinghouse does not meet the higher standards, it will not be eligible for treatment as a "qualified central counterparty" under Basel III, and any member of such a clearinghouse would be subject to a much higher capital charge.

Leverage Ratio

Another major way in which Basel III will affect clearing is through a different type of standard based on leverage. Unlike the risk-based capital requirements, this standard is not based on risk at all. As described by the Basel Committee, the leverage ratio is meant to act as a "credible supplementary measure" to the risk based capital requirements.

At its most basic level, the ratio is defined as tier 1 capital to total exposure. The purpose of this proposal is twofold: to "constrain the build-up of leverage" in the banking sector, and to act as a "backstop" to the risk-based capital requirements. As Stefan Ingves, the chairman of the Basel Committee, commented in a recent speech, the leverage ratio and the risk-based requirements are intended to work together like "belt and braces."

It appears, however, that the leverage ratio may turn out to have more of an impact than the risk-based standards it is supposed to backstop. The Basel Committee proposed a 3% ratio, but national regulators are pushing it higher. U.S. regulators have raised it to 5% and the Swiss finance minister has proposed raising it to between 6% to 10%.

This would have a huge impact on banks. In their third quarter financial reports, Credit Suisse and UBS reported leverage ratios only slightly above 4%. To get to a higher ratio would require either an increase in capital or a reduction in leverage, or possibly both at the same time.

What makes the leverage ratio especially problematic for clearing firms is that the calculation simply sums up the exposures, rather than netting out exposures that offset each other. The result is that the amount of leverage in a cleared portfolio comes out much higher under the proposed leverage ratio than what industry risk models would estimate.

For this reason a number of trade associations, including FIA, have urged the Basel Committee to remove client clearing activity from the leverage ratio calculations. The trade associations have pointed out that the leverage ratio will require banks to set aside more capital for cleared derivatives than for uncleared derivatives. This seems paradoxical, given the G-20's stated interest in promoting greater use of clearing.

"To the extent the leverage ratio applies to client cleared derivatives, the measurement methodologies used would far overstate actual exposures arising from these transactions by failing to acknowledge the substantial exposure-reducing effects of initial and variation margin," FIA said in a response to the Basel Committee consultation. FIA added that the additional capital costs ultimately would be passed on to clients, who as a result might forego trading cleared derivatives or seek lower cost alternatives. "Such effects could increase, not decrease, risk in the financial system," FIA warned.

CME Group has made similar arguments. In a September letter to the Basel Committee, CME commented that the leverage ratio proposal is based on "incorrect assumptions" about the ability of banks to use cleared client collateral for their own leverage. The proposal assumes that client collateral increases the resources available to the bank. This may have been true in the uncleared market, but segregation prevents that from happening in futures and cleared OTC, CME said.

CME added that the CFTC recently approved rules that further safeguard segregated funds. These regulations clearly prevent banks from using cleared customer collateral to leverage themselves, CME said, and therefore this collateral should not be included in the leverage ratio.

"The leverage ratio should be revised to more accurately reflect the restrictions on the banks' ability to use customer collateral in a centrally cleared environment," CME said. "These changes would have the doubly beneficial impact of accurately reflecting the realities of the centrally cleared futures and OTC markets and aligning bank capital costs for central clearing with the [Basel Committee's] stated goals in favor of central clearing for standardized OTC products."

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Basel III Rethink

There are signs that the regulators are listening to the concerns raised by various industry groups. In November, the Bank of England's Prudential Regulatory Authority issued a supervisory statement that addressed several key concerns with the leverage ratio. In particular, the PRA said measurements of risk exposure should be adjusted "in order to avoid creating disincentives to facilitate central clearing for customers."

For example, the PRA confirmed that initial margin received in cash does not have to be recognized as a risk exposure, provided that it is segregated from the firm's own cash. In addition, variation margin received in cash can offset positive mark-to-market exposure. The PRA also changed the methodology for calculating exposure on cleared derivatives so that it does not penalize the principal-to-principal model for clearing used in Europe relative to the agency model used in the U.S. That is a key issue for U.K. banks such as Barclays and HSBC that are subject to capital requirements set by the U.K. regulators.

More recently, the Basel Committee has made several adjustments to the leverage ratio framework that will reduce the impact on clearing. In early January, the Basel Committee announced that exposures to clearinghouses associated with client-cleared derivative transactions can be excluded from leverage ratio calculations, provided that the clearinghouse is a "qualified central counterparty" and the clearing firm does not guarantee the performance of the clearinghouse to its clients. Additionally, the amended leverage ratio framework specifies that the cash portion of variation margin may be used to reduce the leverage ratio's exposure measure provided that certain conditions are met.

Impact on Clearing Firms

While these adjustments address some industry concerns, the overall trend is toward a new set of cost pressures for the clearing business. Historically clearing was not very capital intensive and the main drivers of profitability were operational costs, fees from execution and clearing, and net interest income from customer balances. Now clearing firms have to factor in the cost of capital and adjust pricing accordingly.

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The timetable for implementing Basel III stretches out for several more years, but clearing executives say banks are already adjusting their business models. One reason is trades cleared today may still be on the books years from now when the new capital standards are fully in effect. Therefore the clearing service needs to be priced at a level that will be sustainable in the new environment.

More generally, the major global banks are under tremendous pressure to reduce their risk-weighted assets across all of their businesses. For example, Morgan Stanley informed investors in January 2013 that it aimed to reduce risk-weighted assets in its fixed income and commodities division to less than $200 billion by the end of 2016 from $390 billion in the third quarter of 2011. UBS is making an even bigger reduction; the Swiss bank has said it will slash risk-weighted assets by 50% from the third quarter of 2011 to the end of 2017.

To achieve these goals, banks are examining the capital costs in every line of business and exiting certain business lines that have been rendered less attractive by changes in both regulation and market developments. In this environment, the global heads of clearing will have to demonstrate that they can generate a reasonable rate of return on the capital allocated to this line of business.

For example, suppose a firm submits a $100 million 30-year interest rate swap to a clearinghouse on behalf of its client. The margin requirement would be somewhere in the neighborhood of $10 million, and the clearing firm would have to contribute an additional $1 million to the default fund to cover the additional risk. Under the risk-based capital standards as proposed in June, this would increase the bank's risk-capital requirements by $1 million. Taking it a step further, assume that the bank has a 10% target rate of return on capital. This means that each year the clearing business would need to earn $100,000 to sustain that allocation of capital. This would far outweigh operational costs such as software and clearinghouse fees.

Dave Olsen, co-head of global clearing at J.P. Morgan, said this type of consideration is already affecting business decisions, even though some elements of Basel III will not come into effect until 2018. "Over the course of 2014, very few banks will not be leaning forward into this and reshaping their business models to account for the new costs," Olsen said. "The market is already holding us to these capital standards. We can't wait until 2018 to act. We have to adjust our portfolios today."

More Vanilla Trading

The impact of the new capital standards also will affect trading strategies among the customers of the clearing firms. J.P. Morgan's Olsen said customers will migrate towards strategies that are less capital-intensive. In fact, some trading strategies may be priced out of the market altogether, he predicted, because the capital costs associated with clearing the trade will overwhelm the potential return.

Steve Mahoney, global head of clearing in the prime services division of Credit Suisse, said this trend is already starting to take hold. Traders are moving toward more "plain vanilla" products that will require less capital under the new standards, either because they are more standardized and therefore are more likely to offset each other, or because the strategy itself has fewer moving parts.

"I think the movement away from exotic to vanilla has already begun to happen," he commented. "The banks that made markets in the exotic products saw this trend coming, and they have been offloading their books or winding them down. Those products are extremely expensive from a capital perspective. Even in the vanilla space, I see the potential for hedging in a more simple way by standardizing dates, which would drive ease of compression."

Optimizing Capital Efficiency

Given all these changes, executives at several clearing firms said they are re-examining the way they run their businesses, revising their pricing models and looking for ways to reduce the amount of capital required under the new standards.

One solution is to use techniques like compression to reduce the notional size of the cleared positions. Compression involves terminating trades that are offsetting and replacing them with new trades that provide the same market risk exposures but with lower notional exposures.

"People are going to be looking for ways to reduce these exposures," commented Credit Suisse's Mahoney. "They will be trying to get to the lowest common denominator wherever they can."

There is also the potential for clearinghouses to find ways to help clearing firms and their customers to reduce the cost of clearing. CME for example is working with several clearing firms to offer the benefits of portfolio margining of interest rate futures with interest rate swaps. Six firms now offer that service, and more are in the pipeline. Another example is in Europe, where Eurex is preparing to launch portfolio margining of interest rate futures and swaps later this year through its new Prisma risk engine.

"The FCMs [futures commission merchants] that will prevail will be the ones that have made significant innovations to their existing business models to optimize capital efficiency," commented Citi's Kemp. "For years the FCM industry really didn't focus on the balance sheet because there was very little capital consumed by this business. Now we are faced with a much different construct and FCMs will need to start pricing the new capital parameters into their models."

For example, FCMs need to rethink how they determine their approach to the residual interest held in regulatory buffers, Kemp said. "FCMs need to become more scientific and, frankly, smarter about the way they calculate the residual interest that they need to carry on their books," he said. "There needs to be a move towards iterative, risk-based models that satisfy regulatory requirements but avoid an excessively burdensome capital drain on the FCM."

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