

CLS and Operational Risk

Risk reduction, risk creation. The system developed to resolve the problems of Herstatt risk would engender new exposures for the banking system.

✦ *Michael Knorr, Global CLS Product Manager for Citibank® e-Business Citibank*

In Greek mythology, one of the Labours of Hercules, was to fight and slay a dreadful monster, the nine-headed Hydra. His task was complicated by the fact that, for each of the Hydra's heads that Hercules would sever, two grew in its place. This is somewhat analogous to the situation the financial community might have to face with the advent of continuous linked settlement (CLS), later this year.

By developing CLS, the global banking community has confronted and defeated the monster of settlement risk. However, the architecture of the new system and the consolidation of clearing/settlements activity that is likely to ensue from it will generate increased exposures in the areas of liquidity management and technology.

The extent and severity of these new risk classes cannot yet be fully appreciated. However, prospective participants in the CLS system are aware of their existence and have been taking extensive measures to mitigate them. Such measures as the "in/out" swap between CLS settlement banks, and the Common Cash and Collateral Pool are already under review and discussion, to mitigate systemic exposures.

Regulators and authorities such as Bank for International Settlement (BIS), are also turning their attention in this direction. The proposed new Basel guidelines will be likely to include recommendations for allocating capital against operational risk exposures.

Acceleration + Consolidation = Risk

The cost of accessing CLS technology directly will produce a notable consolidation in the number of institutions involved with primary clearings and settlement activity. Correspondent banks, fund managers and corporate treasurers will be under intense pressure to deal with banks having direct CLS access, as authorities and shareholders demand that they do business through the safest available means.

The diffuse market for foreign exchange that currently exists will be replaced with a system in which the top players may control 20 percent or more of

the market, in a manner that is not dissimilar to the U.S. automobile industry. User options for spreading the business will be correspondingly reduced.

Combine this with the reduced settlement time for securities transfers-payment for which is often negotiated in the foreign exchange market-and the mechanics of the CLS system; the result is likely to be an increased exposure to liquidity risk among CLS participants.

For instance, the schedule of five daily one-hour payment "windows" based on Central European Time-during which the system's individual and aggregate short position limits must be observed-will test the resources and liquidity management skills of banks providing settlement services for CLS members through nostro accounts. During these periods, central banks involved in the CLS system may have to introduce intra-day liquidity in stress situations to support the system within its required limits.

Challenges may also arise in terms of transfers between the CLS system, various national real-time gross settlement (RTGS) systems and Net Settlement Systems. An operational issue in a net settlement system that delays the release of liquidity back into the RTGS environment might cause an issue with CLS funding and subsequent delay CLS payouts in another currency. A simple operational problem can cause a down stream chain reach with liquidity issues, not just in one currency, but also across multiple. The linkage that CLS has created between currencies will make the isolation of problems to one currency more difficult. This linkage is the primary motivation behind the industry to focus on Cross Currency Cash and Collateral Pool, to have a solution that links the generation of liquidity.

Accounting techniques employed by CLS member banks will also need to be updated, to deal with multiple currencies and to differentiate between CLS and non-CLS foreign exchange transactions.

The breadth and depth of technology supporting clearings and settlements will also inevitable be tested by the increased speed with which transactions will have to be processed in the new, post-CLS environment. Processing of information from trading, through the middle office to the back office will have

to achieve new standards of speed and accuracy.

Overall, post-CLS, the chain of information and events that constitutes the foreign exchange trading system will be moving at a speed and density that we can only imagine in the present environment. The “assembly line” machinery that supports this process, running at untested speeds, will have to be lubricated and maintained to support the new standards. Quality of its systems and networks and the level of its staff’s training could prove to be limiting factors in terms of a bank’s access to CLS, just as much as the cost of entry.

The situation with respect to suppliers will be analogous to the “just-in-time” inventory management system that has gained currency in the industrial sector. However, any conceivable single failure in an industrial environment would not be as grave as a breakdown in the interbank exchange markets, domino effects from which could confound global markets at least as severely as settlement failure. For that reason, the clearings and settlement process should be transferable, virtually instantly, to a back-up system.

Obviously, access to the current panoply of Web-based and other straight-through processing techniques-reducing the human factor in operations-will be a positive factor in achieving the necessary levels of speed and accuracy. However, it also increases reliance on hardware and software. If there is a problem with these after operating staff has been reduced, how will that be resolved? That consideration places a paramount emphasis on “technical resilience” of CLS participants.

Analysing the Exposures

In anticipation of the advent of CLS, a great deal of attention has been directed toward the kinds of operational problems that might arise and what means and measures would be necessary to minimise associated risks. In fact, banks that will be direct participants in CLS have already installed, or are installing, measures and systems for the purpose of operational risk management.

Looking at potential causes for operational risks should not be constraint to the existing process flow. A thorough understanding of the process lineages is beneficial to identifying changes that are required in the upstream process to make the overall process safer. Practices in the front office to cancel and resubmit confirmations to correct data confirmations should be reviewed, as copies of confirmations serve now as payment instructions in the CLS environment. An attempt to correct a non-essential field for settlement purposes might lead to an unsettled instruction, subsequently leading to compensation claims or increased risk due to gross settlement outside of CLS.



The approach of regulators to operational risk includes increased scrutiny of the systems standards, training and “technical resilience” of CLS system participants. In the U.S., authorities like the Federal Reserve Bank and Office of the Comptroller of the Currency have moved right in with the largest banks, maintaining full-time oversight in their offices. However, in the end, such scrutiny becomes another factor that tends to raise the bar one must hurdle to participate; it thus contributes in some measure to the consolidation of the post-CLS interbank foreign exchange trading environment.

The level of “in-house” sophistication with which the problem is being approached may vary considerably. Generally, however, the larger institutions-those with direct access to the system-are conducting extensive and technically advanced analyses to determine and cure prospective weak points in their internal processes and controls.

The reason for their efforts is straightforward: the better job they do identifying and eliminating exposures, the less the amount of reserves they will have to maintain against consequences of an eventual breakdown.

As the banking community gains experience regarding the extent and severity of the operational risks it has created with CLS, it seems probable that they will discover means by which this risk can be transferred



to insurers or the investment community. This will obviate many of the problems associated with consolidation of activity, while leaving intact the economies of scale that the process will engender. It will occur in the same manner that risks involving letters of credit and other bank undertakings are now transferred to the markets.

It is probable that, within a few years, capital markets will experience the first of a number of issues repackaging and securitising banks' operational risk exposures to their correspondents and clients, perhaps through the use of credit derivatives. The key to this operation would be to develop a reliable benchmark by which such risks can be quantified. Discussions held between Settlement Members and their Nostro bank, is a clear sign that the industry is trying to get a better handle on operational risks. Industry working groups have developed standards around the service level that should be offered by a Nostro bank to its Settlement Member customers. As CLS risk regime has increased in clarity, the impact of a Nostro bank failure will be severe compared to today's standards. The new rules of engagement between Nostro bank and the Settlement Member immediately raise the question of how the Settlement Member should be compensated in the event of operational or liquidity failure by the Nostro bank. Clearly, existing rules of applying back valuation will not work to

cover intra-day compensation claims. Of course, the issue of compensation can be deferred until an event occurs and the details are worked out on a relationship basis. Due to a lack of precedent, this will probably lead to unsatisfactory results, especially if the Nostro bank failure caused pay-in calls and secondary defaults, resurrecting the consequential damage question. If compensation practices are not clarified, then the Settlement Member will be left to his own devices. In this case, the solution might be to build up the operational loss reserve. This of course brings up the issue of allocating capital against the risks resulting from operating in the CLS environment.

Conclusion

Although CLS has confronted and defeated the historic problem of settlement risk in the foreign exchange market, its mechanics and the consolidation of global foreign exchange business, will probably create new operational exposures for interbank markets. The general nature of these exposures has been recognised for some time by banks and regulators, which have been actively moving to counter them with improved systems, processes, and training. The most important risk-mitigating factor in the new CLS environment will be open communication between CLS, Settlement Members and the Regulators. In crisis situations, a constant exchange of information provides a better basis for decisions regulators have to make. During this situation, the true benefit of CLS will be exhibited.

It is entirely possible, because of these aggressive countermeasures, that operational difficulty—whether related to liquidity or technology—may never arise. This would permit all participants in foreign exchange trading to enjoy the benefits of consolidation, in terms of economies of scale.

Even in the post-CLS environment, consolidation of business should never approach the level at which questions of monopoly or disproportionate market control will become a consideration.

As investors become familiar with the nature of these new risk categories, it is likely that banks will undertake to transfer some of their exposures to the capital markets via securitisation. Again, the end result of this activity would be to leave the banking system with the benefits of CLS, without the need to allocate capital and resources against possible risk events.

Michael Knorr is the Global CLS Product Manager for Citibank® e-Business. He is located at the Citibank® e-Business global office in Stamford, Connecticut. Readers wishing to obtain further information about the features of CLS and management of operational risks associated with the system may contact him directly at (203) 975-5067, or by e-mail at michael.knorr@citi.com.

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