



Working exactly as designed to take settlement risk out of the market

The stress-testing of CLS

The foreign exchange clearing house came through the banking crisis with colours flying, but there's more to do before settlement risk is fully tamed

You might call it the risk vector that did not bark. When Lehman Brothers filed for bankruptcy protection on September 15, 2008, all the investment bank's foreign exchange trades, amounting to more than \$150 billion, were successfully settled. Altogether that week, the CLS settlement system processed trades worth more than the combined GDPs of the US and China, without outages or other disruption.

In sum, "CLS worked exactly as designed, taking huge settlement risk values out of the market," said the organization's communications director, Jonathan Butterfield. Speaking at the recent UBS International Cash Seminar (see page 8), Butterfield looked at CLS achievements to date and possibilities to come.

The CLS story started in June 1974 when Bankhaus Herstatt, a small German bank, failed after it had been credited with D-Marks but before its New York agent bank could pay away the corresponding dollars to its counterparties. As a result, Herstatt's forex trading partners faced potential principal losses of \$650 million and settlement exposure gained a new name.

Nudged by regulators, a consortium of 62 banks came up with the continuous linked settlement (CLS) concept, where pay-

ments go out only when the counter-payment is simultaneously received. The CLS Bank went live in 2002. The key advantage of the CLS approach is that no principal changes hands should a counterparty fail before settling its side of a transaction.

Today, CLS is still the only means by which settlement risk can be eliminated with finality, Butterfield notes. The system covers 17 major currencies and six main instruments: FX spot, forwards, option exercises, swaps, non-deliverable forwards, and credit derivatives. To do this, CLS depends on a robust and resilient infrastructure, but IT is by no means the whole story.

To assure settlement finality, a sound legal framework is a pre-requisite. "It's fair to say that the rulebook plays just as crucial a role as technology," Butterfield says. So much so, that legislative changes have been required in the countries of all CLS-enabled currencies except the US.

Having established a robust settlement platform, CLS is extending its service offering. Settlement for the cash flows underlying non-deliverable forwards – a type of foreign exchange deal where only the difference between the contracted and spot prices is delivered – was added to the organization's repertoire two years ago.

Next came cash settlement for credit derivatives, added in November 2007. Based on the Depository Trust & Clearing Corporation's data warehouse, the central settlement process, allows straight-through processing from confirmation to settlement with virtually no human intervention. Compared to the largely manual, institution-to-institution settlement process that it replaces, the CLS/DTCC approach offers a huge reduction in systemic risk. In principle, this settlement model could also be applied to other over-the-counter derivatives products, including interest rates, equities, and commodities.

For now, though, CLS is concentrating as much on widening its user base as it is its product range. That strategy reflects market demographics. Forex trading between banks, CLS's original constituency, accounts for a falling share of total global forex turnover, declining by 10 percentage points to 43% of total between 2004 and 2007. Meanwhile, the share of forex turnover transacted between banks and other types of institution (including hedge funds and pension funds) rose from 33% to 40%.

These trends account for the steady growth in CLS transactions from funds. This has risen from fewer than 50,000 instructions on the March 2006 quarterly settlement day to a peak of more than a quarter-million instructions last December.

Growth in forex trading volumes driven by hedge funds, algorithmic traders, and other new-generation market participants also stands behind the CLS aggregation venture, a joint venture with ICAP, the interdealer broker, and Traiana, its subsidiary, a technology firm. Intended as a complement to CLS settlement, the new service automatically consolidates individual trades into a single, larger transaction for processing and settlement. Aggregation reduces processing volumes for prime broker banks, reducing settlement costs and operational risk.

That last point is critical. CLS now settles more than half of the world's estimated \$3.2 trillion in daily forex turnover, but that still leaves some 45% of turnover to be settled in ways that are more subject to Herstatt risk. Last May, the BIS's Committee on Payment and Settlement Systems called for additional measures to reduce systemic settlement risks in the foreign exchange markets. The CLS/ICAP aggregation initiative should be seen as one more step in that direction, Jonathan Butterfield suggests.

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