

Improving efficiency – don't ignore the back office

The back office is too often neglected when looking for ways to improve efficiency in securities trading.

Mike Halls reports.

In the securities business they call it the MEGO factor. My Eyes Glaze Over when we talk clearing.

The trouble is — MEGO notwithstanding — the logistics of processing securities are nowadays far more complex than the trades themselves. Some of the best brains in the Euromarkets are now to be found not enshrined in glory on the dealing floor but hard at work rethinking back office processes.

“One of the strengths of the international securities market has always been its flexibility,” says Luc Vantomme, managing director at Euroclear Bank and responsible for banking activity and network management.

“But that flexibility has created increasing complexity. Nowadays only about 25% of the securities issued are plain vanilla. There is, for instance, a growing number of structured products that — over its lifetime — require continued and complex inputs to service the asset.”

One has only to think of the range of structured MTNs, for example, where a coupon may change according to being pegged or reverse-pegged to a stock index or an inflation rate to realise that asset-servicing for the investor (and the issuer) has become ever-more complex.

The growing complexity also goes with an increasing number of specialised intermediaries (calculating or conversion agents, corporate action dealer managers and many more) in the issuer-investor chain.

Also, despite the plethora of technology surrounding most trading floors, apart from some parts of the commercial paper and certificates of deposit market — which uses EPIM (European Pre-Issuance Messaging) — most of the information concerning a debt issue is transmitted over the phone, by email or by fax. Some 90% of corporate action information is sent through non-STP channels to the international central securities depositories, Clearstream Banking and Euroclear Bank. This feels more 1998 than brave new 2008.

One of the more exciting initiatives to increase efficiency started early last year, initiated by Clearstream Banking, Euroclear Bank and other concerned parties. The goal was to improve processing efficiency over the entire lifecycle of a security and along the entire process chain from the issuer to the investor.

“Complementary to other initiatives by individual industry bodies that were specific to their sector of the market, we decided to try and include every organisation into the one grouping,” says Vantomme. This approach resulted in the formation of ISMAG in June 2007.

ISMAG — the International Securities Market Advisory Group — consists of Clearstream Banking, Euroclear Bank and senior representatives of issuers, lead managers, paying agents, common depositories and investors and trade associations such as the Association of Global Custodians, ICMA and the International Capital Markets Services Association.

The first instruction by ISMAG has been to get every-

one pointed in the right direction, to focus on issues of standardisation, timeliness of communications, operational efficiencies, and creating the framework to move eventually to the Holy Grail of the back office — straight-through processing. STP is whereby the entire information dissemination for a securities trade is automated from the issuer through the intermediaries to the end investor.

For those in the front office, the role of ISMAG seems at first glance superfluous. Surely the present system works well? If the system isn't bust, why fix it?

About five good reasons appear to reject the *status quo*. Perhaps the first is the most obvious — there are still too many manual processes linked to the issuance and servicing of the international securities. And manual processes, as any back office manager will tell you, are inefficient, prone to error and a waste of human resources.

Moreover, the increasing complexity of the structures has led to a corresponding increase in mistakes — such as interest payments having to be recalculated, timeliness worsening or prospectuses being lodged late.

The next reason comes from the first and it is simply one of risk and related costs. Fixing a mis-keyed entry that happened early in the information chain is cumbersome and risky and infuriates investors.

And from a bean counter's point of view as operational risks decline in this example, so do costs.

Although the introduction of next generation computing systems needed for STP is costly, the alternative of using human beings is even more so.

One City bank effectively introduced a form of STP into its forex trading and clearing processes in the early 2000s and was eventually able to reduce its back office headcount by some 1,000 staff. The savings were in the tens of millions of dollars annually.

Importantly too, the volumes of securities needing to be cleared and processed is rising. Automation has to be the key in this respect. With a rapidly growing number of bankers and investors interested in cross-border purchase of securities, growth in volumes has been and could remain extraordinary.

For example, on the NYSE (*see chart on page 24*) the daily number of trades and price quotations has swelled from 1m-plus a day 10 years ago to the hundreds of millions.

The fourth reason for the need for change is the way that the whole securities industry is changing. The drive is to offer products of ever-greater complexity and this requires ever-more accurate and timely information for the involved asset servicing companies.

The last reason is that simpler and more efficient processing leads to greater customer satisfaction; something always of benefit in relations between issuers and investors.

Last September ISMAG swung into action aiming to achieve what it called the “quick wins”. It outlined two immediate areas that it reckoned could improve operations.

First is the so-called “securities static information provision” which is tied in with ISIN allocation and dissemination and either accompanies it or follows it. Securities information is provided by lead managers, legal coun-

sels and IPAs by e-mail or fax. Again the process is highly manual and therefore volume sensitive.

Second is the information provision on corporate actions. There is also the question of service level: the increasing complexity and shorter time to market creates a need for increased flexibility in terms of processing timing; this is currently undermined by exchanges between the lead manager, the ICSDs and their agent that are mostly still based on non-STP messages, and therefore require longer time to be processed. Also non-harmonised language and documents used in such processes add to delays because of need for extra clarification and interpretation.

Since September ISMAG has focused on creating what it calls a "Market Practices Book" that deals with these three areas. The first Market Practices Book that will be delivered proposes ways of standardising and clarifying — by definition of roles and responsibilities — the information provision processes for issuance of new debt and for corporate actions.

It may be called a "quick win" but it is in fact a Herculean task as it must be comprehensive and — equally dif-

ficult — all the parties in ISMAG have to be satisfied with its contents.

Vantomme says an advanced "ISMAG endorsed" draft version of the book should be finished by June. It will then be released to a wider market audience for their input with hopefully a final version of the Market Practices Book covering the two areas of "quick wins" being agreed this September.

From mid-2008 the aim is to start improving further the speed and quality of information provision, which includes the creation of standardised templates and some light version of STP in communication channels — an awesome task in getting every party involved in the process to agree. This will eventually lead on to the third, and theoretically final, year of ISMAG's operations which will look at the thorniest issue of all — agreeing on full end-to-end STP.

"This could well be the hardest part of all," says Vantomme. "As people will then have to commit system resources on top of their time." ISMAG favours using existing tools/ways to get to STP but also knows there is no common platform to be used for the moment. ❧

Technology needed: procedures alone can't help

Transactional efficiency is more than just looking for better procedures or ways of working. It can also come as a technological fix.

The chart below shows trade and quote data for trading on the New York Stock Exchange. "The first thing to note is that this is almost an L-shaped curve looking ready to become vertical," says Simon Garland, chief strategist at Palo Alto technology firm Kx. "Data volumes of business are going through the roof. This year the NYSE could well hit a billion records a day."

Although the volume of trades on NYSE has picked up over time, the growth in activity is nearly all associated with quotes.

This is to do with "programme trading" — an umbrella term used where buy/sell firms have firms that routinely are testing to see what prices are available. Programme trading also allows larger trades to be broken down into smaller ones that can then be bought and sold without other market participants realising that a large trade is in progress.

Traders on the exchange have the extraordinary problem, given that they receive all the data on trade and quote, of accumulating unprecedented amounts of information at an unprecedented rate.

"Analysing such volumes of data is no longer a straightforward process," says Garland. "It's no longer possible for hardware improvements alone to provide the additional process-

ing power to keep up with the amount of data coming in.

"Moore's law — which roughly says that processing power will double every couple of years — hasn't been able to keep pace with the enormous growth in data volumes."

Analyzing the data is an interesting exercise in terms of creating an efficient market in various ways.

First, as every good hedge fund will tell you, if you are spotting trends in the market before everyone else, you're in a good position to make money. A whole new generation of so-called "algo" [algorithm] traders spend their life using high-powered computers trying to be first in detecting trading anomalies or arbitrage contained within markets.

Second, from a regulatory perspective, every trade that occurs has to be checked to see that it's not a rogue event. Does the ISIN match both counterparties'

agreements, is the quotation within the best bid and offer?

Another example is pre-trade risk — although many of these checks will be made as the trade happens, not all of them are done live. For example, one indication of a suspicious trade is when the location of the buyer/seller is not the normal one for that party. Typically, this kind of checking for suspicious trades is done overnight.

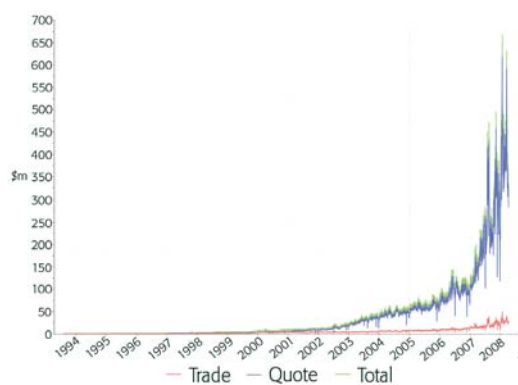
"The trouble is now that the data volumes are so enormous that we're in the situation of some banks having a daily checking process that takes 25 hours, for example valuing a subprime portfolio" says Garland.

One answer to this has been to look at original or philosophically different approaches to programming ways of storing and organising the enormous background databases that these exchanges throw up. "The result is that we can now

offer real-time, live-stream analysis of all exchange data," says Garland. "The direct latency issue of how long data takes to arrive [how long it takes to process information] is now being subsumed by the business latency of how long it takes to make intelligent use of the data.

"Apart from checking records that have just arrived, if performance permits, it is preferable to also check what has happened today, this week, this month. In the past this could only have been a post-trade function, but it is increasingly becoming a pre-trade requirement." ❧

Daily volumes of trades and quotes on the NYSE



Source: NYSE