# Changing lanes

## 4sight Financial Software's sales director Robert Palliser explains how the market has changed in its attitude to collateral

#### BEN WILKIE REPORTS

#### SLT: Firstly, can you tell us a little about the history of 4sight and the range of products it provides to the market?

Palliser: The company was spun off from OM Technology in 2003 and historically has been a provider of integrated stock loan and repo systems across all market participant types direct/agency lenders, niche and global broker dealers etc. Typically, for these institutions collateral management was a function of the trade life cycle rather than a discipline in itself.

Over the last two years, however, 4sight has become far more involved in collateral management as a stand-alone discipline from a collateral optimisation, liquidity management and fee generation perspective rather than as a mere risk mitigant.

If we look back two or three years, traders in many houses were tasked to focus their efforts on P&L generation with only a secondary focus on the collateral management of such trades. In this model, managing collateral was frequently seen as a related but autonomous back office operation.

However, things have changed greatly over the recent past. Our clients are increasingly seeking to optimise their collateralisation processes to ensure that, wherever possible, they pledge the lowest quality non-cash collateral to their counterparts. This allows them to retain their internal liquidity and make use of their access to government debt for firm financing or fee generation purposes.

#### SLT: Is collateral management still run with a silo-based approach, or is it now a centralised function within many organisations?

Palliser: Historically it was very silo based. This was as a result of company structure and product lines and the difficulty faced in cross product netting. It frequently resulted in different departments within a given organisation having radically different eligible collateral schedules, minimum margin thresholds and operating processes with the same market counterparts.

However, this silo approach is being rapidly eroded.

We are currently working with a number of clients who have decided to consolidate and centralise their collateral management. Their business model is now focused on ensuring the optimal use of collateral across a range of products, including repo, securities borrowing and lending, on exchange and OTC derivatives.

In this respect, the centralised collateral department is effectively acting as the single interface for their organisation with their external counterparts across all relevant products and asset classes. It is also functioning as an internal conduit of collateral to/from a range of departments within their organisation.

#### SLT: What market trends or characteristics do you believe has caused firms to look at the centralisation of collateral and do you see these strengthening in near future?

Palliser: These are numerous and getting longer by the day.

The Lehman default, the drying up of market liquidity, and the need to make better use of finite resource such as capital and balance sheet have all been key drivers of centralisation. In addition, the desire to better manage counterparty, correlation and operating risk across all collateralised products is integral to any management decision to centralise such activity.

As firms realise there is a significant benefit to bottom line earnings from effective collateral management and optimisation through reducing costs and generating ancillary income they are quick to embrace this decision. The result is that institutions are now actively seeking technology solutions that can support this model.

#### SLT: Does moving to an integrated approach change the way firms look at the various risks within collateral management?

Palliser: To some degree - yes. The primary risk focus, regardless of operating model, remains the potential for a given counterparty to default and correlation of the collateral to that default. This hasn't fundamentally changed.

However, what is being highlighted via the centralised collateral model is the ability of an or- This in turn is allowing our clients to transform ganisation to look at its various risks across a their collateral management activity - which range of products and on a portfolio basis. Not was previously seen as a primarily operational

just counterparty, but also portfolio, liquidity and operating risks.

In this respect, we have increasingly worked with our clients to model their activities and develop "What If" scenarios that they can run in the collateral management system to see the effect of a pre-determined event. For example, this event could be a counterparty down-grading, increased market pricing volatility, or the general market reluctance to accept a given country's securities or a given asset class etc.

Risk managers within our client firms also want the system to send them automated daily reports to highlight potential warning signs. For example, whether collateral being pledged to them is unacceptable to their own counterparty base, their exposure to a given country or asset class across their combined portfolios, and/ or the size of a given collateral holding vis a vis its free float.

#### SLT: Is there any difference in collateral management within different areas - for example is collateral management different in say, OTC derivatives compared to securities lending?

Palliser: Historically yes, but our clients appear to be taking the best elements from each area and seeking to make them universal.

For example, securities finance and repo markets used to operate with relatively low minimum margin thresholds. They made active use of daily margining and the delivery of non-cash collateral. Conversely, OTC derivative collateral management involved significantly higher thresholds and use of a limited range of collateral. However, it allowed for a greater use of dynamic ratings related triggers.

Now, within the centralised collateral model at least, such variances have become noticeably less marked. We have therefore implemented support for sophisticated eligible collateral acceptability, concentration limit calculation, and haircut criteria, regardless of the underlying product being traded.

### **Robert Palliser**

task - into a liquidity and balance sheet management function. It is now also a way for them to lower their operating costs and/or generate incremental revenue through a reduction in financing costs or the creation of additional stock loan fees

#### SLT: Does this change the human resource required for collateral management and the sales process 4sight undertakes?

Palliser: To some degree - yes, but only in a positive sense.

In the past, the primary function of a collateral manager within an organization was to ensure the successful delivery or receipt of collateral to mitigate that day's counterparty exposure. This often resulted in the unnecessary use of cash and Govt bonds as collateral as they were easy to move on a same day basis in larger parcels than say corporate bonds and/or equities.

Collateral management systems now allow users to forecast their future collateral needs, but also to identify potential shortfalls or surpluses in a given asset class or with a given counterpart. The collateral management focus has therefore been extended from that of exposure mitigation and operational settlement to one of ongoing inventory, liquidity and balance sheet management.

In addition, there is now a good deal of automation in mapping the underlying legal agreements with counterparties. This allows the system to determine the amount, type and quality of inventory that can be pledged to a given counterparty, and to then undertake the creation of the requisite delivery instructions on an automated basis. However, there will be instances on a daily basis where the collateral manager may need to over-rule its inherent logic.

For example, he/she may be aware that a given security is potentially to be sold or is part of a sensitive trading strategy and so not to be pledged. As such, firms require a greater internal knowledge of the source and stability of assets. The ability to immediately drill down on a given security in the system and identify its source and whether a colleague has annotated its potential use elsewhere can help to reduce errors in this respect.

Moving onto the sales process itself, the integrated use of collateral management systems for securities lending, repo, OTC and on exchange collateral management is certainly making the sales process longer and more complicated. This is largely a result of the number of departments involved (traders, collateral managers, risk personnel, operations, regulatory reporting, finance etc.) and the amount of data that needs to be extracted from technology systems for their day-to-day activities.

SLT: Is there a minimum scale a SLT: How much is regulation changbusiness needs to have before it ing the way institutions manage can optimise its collateral? Can a their collateral? client use 4sight for its collateral management activities but retain its existing trading and back office systems?

Palliser: Not really. Regardless of size, leveraged trading organisations require the ability to finance their activities in the optimal manner. The retention of cash and high quality Govt assets - previously used as collateral to third parties and/or exchanges - is thus of paramount importance. This applies whether the potential client is an internationally renowned global player or a small regional bank or broker

Collateral optimisation is in itself a relatively easy concept to understand. However, it impacts upon all aspects of an organisation's activities - from its ability to finance its ongoing activities, through to counterparty and market risk mitigation, the control of operating costs, capital and balance sheet. This is equally important regardless of the size of a client and is perhaps best demonstrated by the spread of enquiries we have received over the past eighteen months.

It is also possible for a client to make use of a collateral/exposure management and optimisation system on a stand-alone basis and merely integrate data feeds to/from its existing trade capture and settlement instruction delivery systems if required.

Typically however, projects involve the development of a tailored solution that also makes use of our securities lending & borrowing and repo modules to closely integrate with the collateral management system.

SLT: Is this centralisation and optimisation of collateral as relevant and/or prevalent in North America, which has traditionally preferred cash?

Palliser: Previously, the US model has been to lend stock on a callable basis against cash collateral.

However, since Lehman, most US based agent lenders now operate both cash and non-cash collateral programmes. US broker dealers are also making use of non-cash collateral in order to minimise their balance sheet usage and in respect of their international activity. Furthermore, the larger North American broker dealers have substantial OTC client driven and/or proprietary derivative books that they need to optimally collateralise.

As such, we are fielding more enquiries from North America than from any other part of the world. We have therefore broadened our scope to look at the collateralisation of ETF creation our clients' traditional OTC derivative activities.

Palliser: The effective use of collateral - in addition to enhancing the bottom line and mitigating risk - can also improve an organisation's use of balance sheet and capital.

For example, we are currently developing the ability within our system to novate bilateral repo trades when passed to a CCP. This will support our clients as they move their activity to the CCP over time in order to take advantage of a reduced risk profile, enhanced netting capabilities and lower capital usage.

#### SLT: How automated is the collateral management and optimisation process within the 4sight system?

Palliser: Very - counterparty exposure is automatically calculated on a real time basis as a result of trades having previously been booked into our SBL or repo systems. Alternatively it is fed in automatically for OTC derivative transactions. The user can then access his inventory and - as his legal agreements have already been mapped into the system -allocate his collateral in line with the prevailing eligible collateral, margining and concentration rule-sets.

Furthermore, we are currently enhancing the system to allow a user to run "synthetic" allocations - based on the above and his available inventory. This can be carried out on an intra-day basis to identify any potential collateral shortfalls or surpluses at contract, client, or portfolio level.

Once satisfied that the optimal use has been made of available collateral, the user can automatically undertake the physical allocation of securities. The system also sends the requisite settlement instructions and confirmations to each of his counterparts. This is across all commonly utilised asset classes, product types and settlement routes.

#### SLT: How big a transition is it to make from the old way of doing collateral management?

Palliser: Probably far less than market participants would initially imagine.

Firstly, there are no changes to the underlying legal agreement, merely a more detailed mapping of its core terms and a far enhanced analysis of the user's available inventory.

The biggest change is probably in the user mind-set, with collateral managers now becoming an integral cog in the management of a firm's liquidity, balance sheet and capital. Whilst operational and settlement knowledge remains vital, collateral management systems now allow and FX forwards in the recent past to complement users to make greater use of technology to assist them in their decision process. SLT