

## COLLATERAL MANAGEMENT

### A SunGard Adaptiv Market Perspective

By Rafiq Tai, Product Manager, SunGard Adaptiv

### MARKET OVERVIEW

The use of collateral as a means of mitigating credit risk has grown enormously over the course of this decade. Industry association "International Swaps and Derivatives Association" (ISDA) estimates that the gross amount of collateral in use stood at \$1.35 trillion by the end of 2007, a significant increase from the \$200 billion in use back in 2000. ISDA also estimates that the number of collateral agreements in place grew by 34% in 2006 and is forecast to have grown by a further 24% in 2007.

The reasons for this increase are both positive and negative in nature. Firstly there is the increasing importance of credit risk management. High profile corporate failures over the last seven years have heightened the need for robust credit risk processes, as have the growing volumes in today's securities markets. Once the current credit crunch is added to this combination, it is easy to see why collateral management has emerged as a vital technique for mitigating credit risk.

There are also some competitive factors that have encouraged greater use of collateral. The decision by the Basel Committee to allow collateralisation as a means of reducing banks' regulatory capital requirements has freed up valuable capital to be used in more profit-making ventures. The use of collateral has also enabled banks to increase their trading activity by allowing them to enter markets that were previously off-limits due to a low credit appetite.

### THE CHALLENGES

Collateralisation creates its own set of legal, market and operational risks which must be managed in order for it to act as a successful means of mitigating credit risk. These include the structure of collateral agreements made between counterparties, exposure monitoring control, the changing market value of collateral, the settlement of collateral transactions and concentration and correlation risks within a collateral portfolio.

The biggest challenge for most institutions is in the transformation of the collateral management function from a seldom-used back office function to a vital, risk management tool that is used to gain competitive advantage. This has led to a host of operational challenges:

- More sophisticated collateral policies including complex collateral terms with concentration limits and credit rated collateral calculations
- Stricter timeframes for the calculation and issuance of collateral calls
- The need for collateral asset optimisation to reduce funding costs and encourage rehypothecation
- A level of uncertainty over the value of collateral, exacerbated by the expansion of eligible collateral types such as physical assets
- Dispute management to resolve potential differences in portfolio valuations between counterparties
- Greater emphasis on sophisticated portfolio level margining techniques
- Increased regulatory requirements on risk management policy and reporting through the likes of Basel II and Sarbanes Oxley

## ADAPTIV COLLATERAL

Adaptiv Collateral is a global, cross-product, enterprise-wide collateral management tool that is dedicated to help institutions mitigate credit risk and reduce the operational risks and costs associated with the collateral management process. It provides the ideal platform to guide users through the entire collateral management process, and is suitable for both global and local collateral management teams within financial institutions that are employing collateralisation as their main means of mitigating credit risk. The system can also be used across a broad spectrum of business areas such as derivatives, repo, FX, energy trading, and the more traditional banking book products.

The platform's customised workflow tools provide the automation, visibility and straight-through-processing that is essential for today's collateral management function, and the import and export capabilities are applicable to a range of standard file formats including Microsoft Excel, XML, HTML and CSV which provide seamless connectivity between systems. The modular nature of the platform means that it can be easily extended to meet growing requirements while installation is quick and efficient and can be done directly on-site or delivered remotely via an application service provider model that is hosted by SunGard.

For more information visit:  
[www.sungard.com/adaptiv](http://www.sungard.com/adaptiv)

## TECHNOLOGY'S ROLE

For those financial institutions that are either entering this area for the first time or have previously managed their activity through the use of Excel spreadsheets, the sheer volume and complexity of today's collateral management market means that manual processes are no longer sufficient and sophisticated new systems are needed.

### ■ Automation

There are a lot of background processes that run in a collateral management function, such as the loading of market data, trades and asset positions, in order to calculate exposure. All of these processes need to be automated.

### ■ Workflow

This will guide users through the collateral process, from the calculation of the margin call to the physical settlement of collateral, with regular updates as to the progress of the process. Users should therefore be able to see the condition of any margin call with any counterparty at any time of the day.

### ■ Reporting

There should be a suite of either pre-defined or customised reporting tools to satisfy both regulatory requirements and internal management needs.

### ■ Agreement definitions

Every collateral transaction must have a legal agreement between the two counterparties and a collateral management system should be able to capture all of the static data pertaining to these agreements and their terms and conditions.

### ■ Cash / Asset management

For cash collateral, functionality is required to calculate the interest that will be paid or received. For security collateral pre-defined rules regarding eligibility and preferences are required to allow the easy selection of assets to be received or delivered. The ability to apply concentration limits to control the collateral asset portfolio is vital in managing the concentration and correlation risks arising from a collateral portfolio. The ability to rehypothecate the collateral asset pool between agreements is crucial as asset optimisation continues to be a prominent theme within collateral management, and the area evolves from just being a simple cost centre to a means of reducing costs and providing competitive advantage.

The benefit of deploying a system that contains all of these properties is that firms will be able to confidently run their collateral management business knowing that the operational risks have been significantly reduced. Firms will then be able to realise the full advantage of a more sophisticated and ambitious collateral management function that mitigates their credit risk, facilitates more trading, increases market access and liquidity and creates more competitive deal pricing.