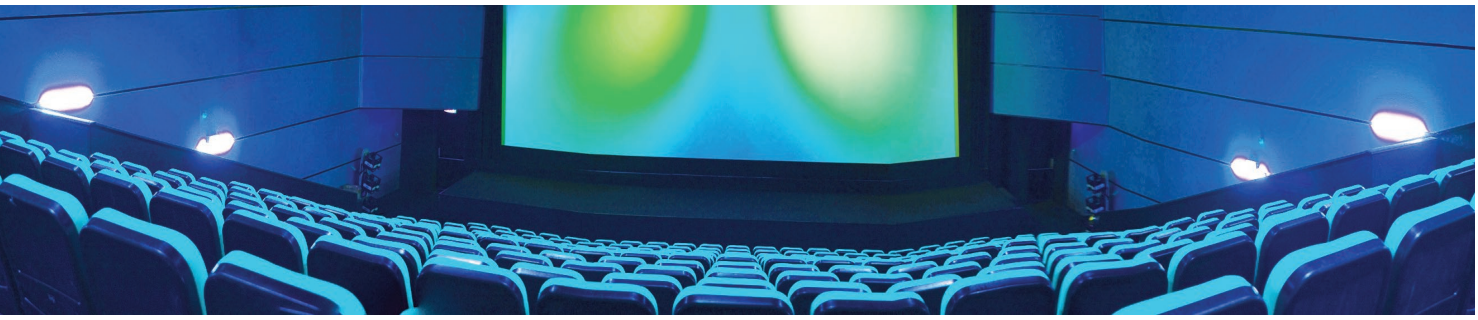
Deloitte.

Collateral management
Takes centre stage



Amendments to Basel have brought forth increased capital holding requirements, reduced leverage and new liquidity requirements.

The occurrence of the financial crisis highlighted the importance of two key fundamentals – credit risk and liquidity risk. In the over-the-counter (OTC) derivative market as well as the stock borrow stock lend (SBL) the default of major market participants was realised and the lack of market transparency identified. The events of the financial crisis has given rise to a series of new regulations being implemented over the last couple of years. South Africa, being part of the G20, is not immune to these regulatory changes and thus there is a renewed focus on safe guarding the local banking industry. Both local and international markets continue to change in response to the above, however the timing and consistent application of these changes proves to be critical in order to avoid any arbitrage opportunities within the markets.

During 2009, the G20 made its aspirations clear that standardised OTC derivatives would be required to be centrally cleared and that stricter requirements would be imposed for non-cleared trades. In meeting South Africa's G20 mandate, our local Regulator is faced with a difficult conundrum as consideration is given to the merits of establishing a local CCP (Central Counterparty Clearing), giving recognition to foreign CCPs or allowing a combination of both. Basel III provides further incentives to clear OTC derivatives through CCPs by offering significantly reduced capital requirements as well as the exclusion of a CVA (credit value adjustment) capital charge.

However, while the recognition of a foreign CCP may appear to be the most simplistic answer, considerations need to be given to the increased systemic risk that may arise should world markets rely on a limited number of CCPs. Further, the focus to centrally clear OTC derivatives has the potential to increase liquidity risk, as the increased margining requirements may place strain on cash which is predominantly placed as collateral.

Amendments to Basel have brought forth increased capital holding requirements, reduced leverage and new liquidity requirements. This has driven the need for banks to change the way that they do business as they look to reduce their capital requirements and improve their liquidity.

Increased Capital requirements

- The general increase in both the quality and quantity of capital has been driven by the introduction of the conservation and countercyclical buffer as well as increased risk weightings in some asset classes. Ensuring that there is adequate collateral posted against these exposures can reduce the required capital charge.
- The margin period of risk is defined as the period of price risk that a collateralised transaction is exposed to, i.e. how long will it take to realise the collateral placed. This is used in the calculation of the exposure at default (EAD) in the determination of the bank's capital adequacy ratio. Basel III has proposed that this period be increased to 20 days for both OTC and securities financing transactions (previously 10 days for OTC derivatives and 5 days for securities financing transactions) depending on the liquidity of the collateral. These increased holding requirements highlights the need to have liquid collateral that can be easily replaced in times of market stress.
- The introduction of a CVA Risk capital charge requires banks to hold additional capital over and above the minimum capital ratio, adding further strain to available capital. The CVA calculation is a function of effective exposure and increased collateral decreases this exposure thereby reducing this charge.
- It is common practice for margining thresholds to be a function of the counterparty's credit rating. However this scenario can act as a self-fulfilling prophecy in the market, as the subsequent margin calls can intensify the counterparty's financial difficulty through creating a liquidity strain. This was noted during the financial crisis and as a result, Basel III has precluded the inclusion of additional collateral required as a result of a credit downgrade in calculating the EAD.

New liquidity requirements

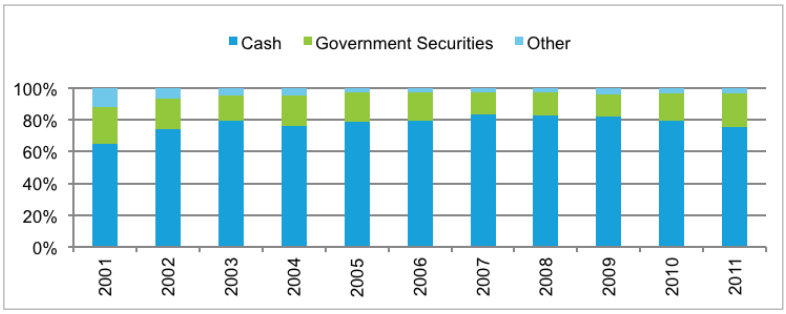
During the financial crisis, it was evident that liquidity and funding issues proved to be challenging during periods of stress. Thus, while improving on capital requirements, Basel III has also introduced revised liquidity requirements requiring banks to demonstrate adequate liquidity in the short term. The introduction of the liquidity coverage ratio (LCR) gives rise to greater amounts of high quality liquid assets (HQLA) being required. These are assets that can be quickly converted to cash without losing any value and ought to be Central Bank eligible (e.g. cash, government bonds, marketable securities and PSE's). The aim of the LCR is to ensure that banks have enough funding over a 30 day period (365 day period for NSFR) should a sudden shock in the financial system and or a run on the banks occur. Prior to the introduction of the committed liquidity facility provided by SARB, the Banking Association of South Africa estimated a funding liquidity shortfall of more than R900 billion. As liquidity dries up, strategies to free up cash/HQLA are considered, possibly driving the move from cash to non-cash collateral OTC type transactions.

Collateral reform

According to the most recent ISDA Margin survey, just under 80% of the collateral delivered globally is in the form of cash. Given the increased demand for cash and government securities in order to meet the new Basel III liquidity requirements, alternative forms of collateral will need to be sought.

Collateral delivered against non-cleared OTC transactions

(ISDA Margining Survey Statistics 2002-2012)



The financial crisis highlighted the importance of managing credit risk and the use of collateral has been considered as an appropriate mitigating factor.

The financial crisis highlighted the importance of managing credit risk and the use of collateral has been considered as an appropriate mitigating factor. The use of collateral is estimated to increase significantly, with a recent IMF Working paper (WP/13/25) estimating a global under collateralization of about $3 to $5 trillion. While there may be a move to non-cash collateral in an attempt to address this gap, this in itself has its own challenges. The use of non- cash collateral may reduce liquidity risk, however it also gives rise to the banks susceptibility to wrong way risk and concentration risk.

Operational risks may increase if the technology is not appropriate.

For many organisations, particularly banks, current collateral management processes are fragmented and inefficient, which are both key flags that the discipline is in need of revitalisation. Regulatory pressures will drive this process as banks explore ways to optimise their current collateral management process, while reducing the operational burden. However, this does not only influence banks but asset manager and pension fund administrators too, as they look to reduce their counterparty exposure by requiring more collateral.

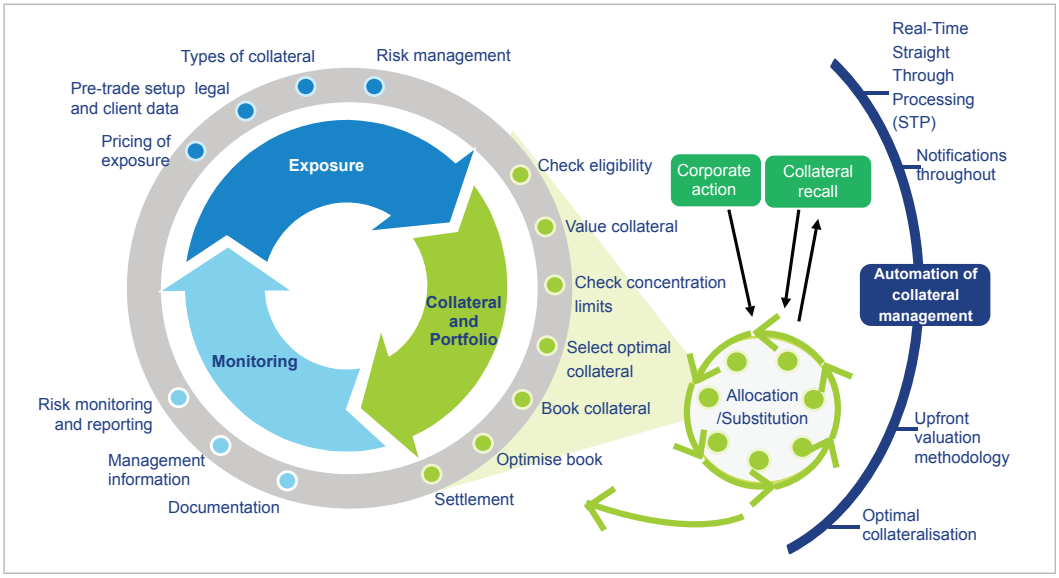
With the increase in the volumes of collateral given some of the regulatory reforms highlighted above, current collateral management processes will need to be enhanced in order to handle the high volume data with intense process management and multiple business lines involved. Operational risks may increase if the technology is not appropriate. In order to obtain a holistic view of collateral and eliminate silos, existing manual collateral management practices will need to be replaced by automated processes through technology transformation efforts. This will not only allow an organisation to identify its concentration risk, but also reduce potential capacity problems that may arise from the increased volumes or a possible market stress.

Re-hypothecation or re-use of collateral impacts the liquidity management process as it becomes more difficult for organisations to call back their collateral promptly from their counterparties as their counterparties would often have to call back collateral from their own counterparties, complicating the entire process and increasing systemic risk. The necessity for a bank to be able to track their collateral and ensure that the posting or recall of collateral happens in a timely manner was highlighted during the financial crisis.

A clearer view

In order to ensure that the use of collateral is optimised and appropriately managed, organisations will need to look towards a more automated process. This process will need to facilitate the use and valuation of non-cash collateral, track collateral, calculate and perform margin calls and provide a holistic view of collateral received and delivered. A change to an automated process would need to incorporate:

Change in the collateral management as usual approach



The benefits of automating the process would include:

- **Real time valuation of collateral** would identify wrong way risk and asset correlation of non-cash collateral. Further, it would provide a mechanism to assess the liquidity of the collateral held which is of importance in times of market stress.
- **A holistic and transparent view of collateral** across parties, geographies and asset classes would allow suitable monitoring of concentration risk. Physical collateral settlements confirmed through a secure 3rd party solution would provide an independent inventory check for collateral balances on a daily basis.
- **Automated margin calls** would reduce the susceptibility to manual error, thus reducing operational risk.
- **The use of non-cash collateral** may reduce the liquidity impact arising from increased margining requirements as a result of the drive towards central clearing.
- **A market integrated management system** would allow the tracking of collateral and identify where such collateral has be re-hypothecated.
- **Real time margin calls** provide the opportunity to reduce settlement risk as it allows one to move away from the standard T + 1 settlement convention to intraday settlements.
- **Establishing collateral agreements** with counterparties will clearly define eligible collateral, margin thresholds, etc. clearing up potential miscommunications.

Automated margin calls would reduce the susceptibility to manual error, thus reducing operational risk.

The current changes in the regulatory environment will require organisations to change their business models to improve the management of risks associated with OTC derivatives and SBL transactions. An increase in the volume of collateral transactions will further necessitate the optimisation of these processes. As a result, one would expect a renewed focus on collateral management and the settlement of collateral from both regulators and market participants over the next 6 months.

Contact

Ashley Sadie
Senior Manager
Capital Markets
Deloitte
Mobile +27 (0)82 784 6394
asadie@deloitte.co.za

Designed and produced by Creative Services at Deloitte, Johannesburg. (806063/jomaris)