



**What Comes Next for Collateral Management:
Results from the 2010 SunGard/Finadium
Survey**

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Executive Summary

The SunGard/Finadium 2010 Survey on Collateral Management has identified collateral optimization and efficient collateral management as being the next big challenge for the collateral management industry. Whether facing new Basel III recommendations or looking to make processes more effective, 122 participants in the collateral management industry have clearly indicated that capital charges and optimizing the use of assets are their primary concerns. They also expect the next important advances in collateral management to occur in these areas. Technology will be a primary driver for meeting new collateral optimization mandates and solving both siloed and cross divisional challenges.

Other highlights of the survey include:

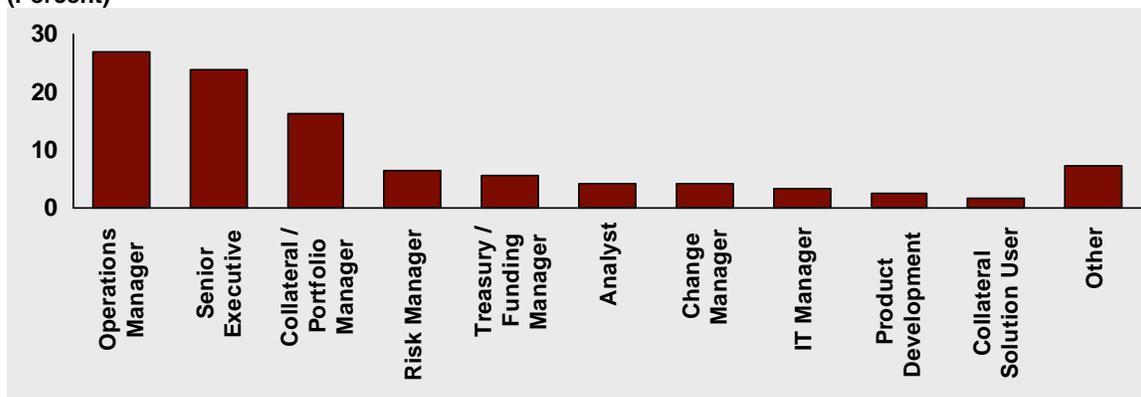
- Survey participants expect that collateral optimization, including managing cross-product netting and the use of central credit counterparties, will be the next areas for advancement in collateral management.
- Over half of the survey respondents see collateral management not only as a risk mitigation process, but also as providing them with an opportunity for revenue generation.
- New Basel III regulations could impact the viability of certain business lines linked to collateral management and may drive trading towards central credit counterparties.
- Conversations about outsourcing collateral management have largely subsided; most firms have already outsourced or do not plan to in the foreseeable future. However, an expanded use of central credit counterparties may make outsourcing more necessary, less difficult or both.
- Respondents were primarily senior management and operations executives from banks and asset managers in Europe, North America and Australia, with additional representation from the Middle East, Africa and Asia. These executives worked primarily in OTC Derivatives, Securities Lending or Repo.

Methodology

The study was conducted using an online survey in June and July of 2010. Respondents were invited to participate by direct email from Finadium and through an invitation from the International Securities Lending Association (ISLA). Our intention in soliciting this pool of respondents was to target professionals directly involved with collateral management on a day-to-day basis. Respondent names remained anonymous.

In total, 122 professionals took the online survey. Over half the respondents were operations managers or senior executives with the remainder holding a broad variety of titles and functions (see Exhibit 1). While not all respondents answered every question, this group provided responses at a high enough level that we were satisfied that we had captured a sophisticated degree of industry thinking.

Exhibit 1:
Respondents to the SunGard/Finadium 2010 Collateral Management Survey
(Percent)



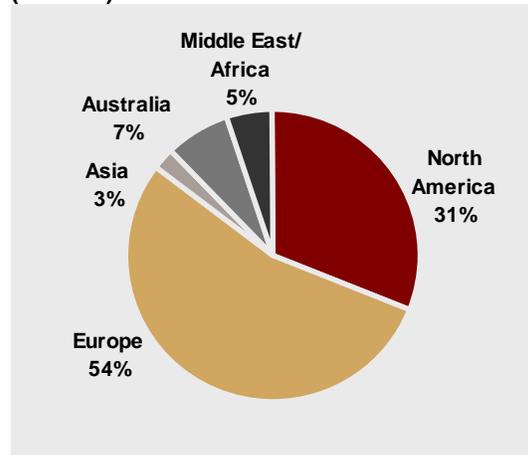
Source: SunGard/Finadium

Survey respondents came from a wide range of geographies. A slight majority were from Europe with a third from North America and the remainder from other parts of the world (see Exhibit 2). We found that geography was not a major

determinant of the types of answers received from respondents, suggesting that the concerns of collateral managers are similar around the world.

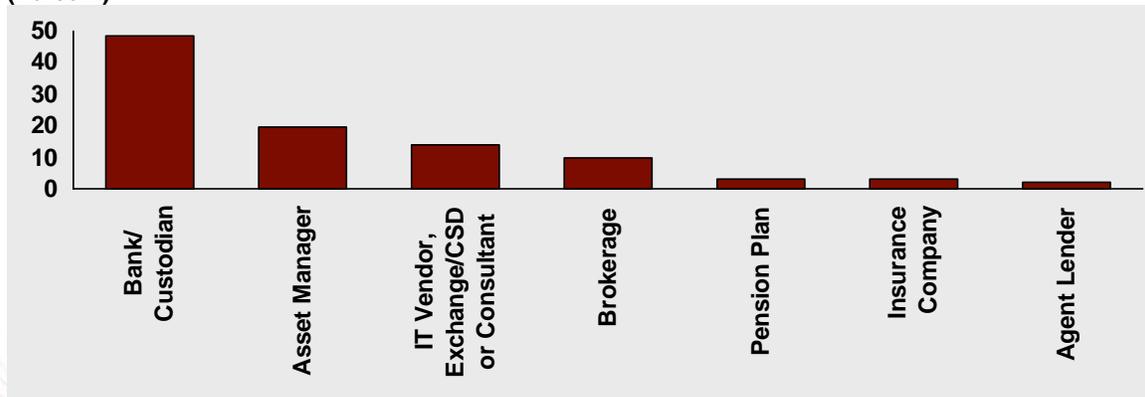
As would be expected, respondents came from a variety of businesses in financial markets with custodial and non-custodial banks leading the way (see Exhibit 3). While a concern with this type of survey is that it becomes dominated by banks or vendors, we were pleased to note that 26% of respondents were at asset managers, insurance firms or pension plans. This group helped provide a balanced overview of the thinking of buyers, sellers and service providers in the market. An additional 14% of respondents came from a technology vendor, exchange, Central Securities Depository or consultancy.

Exhibit 2:
Geographic region of survey respondents (Percent)



Source: SunGard/Finadium

Exhibit 3:
Businesses of survey respondents (Percent)

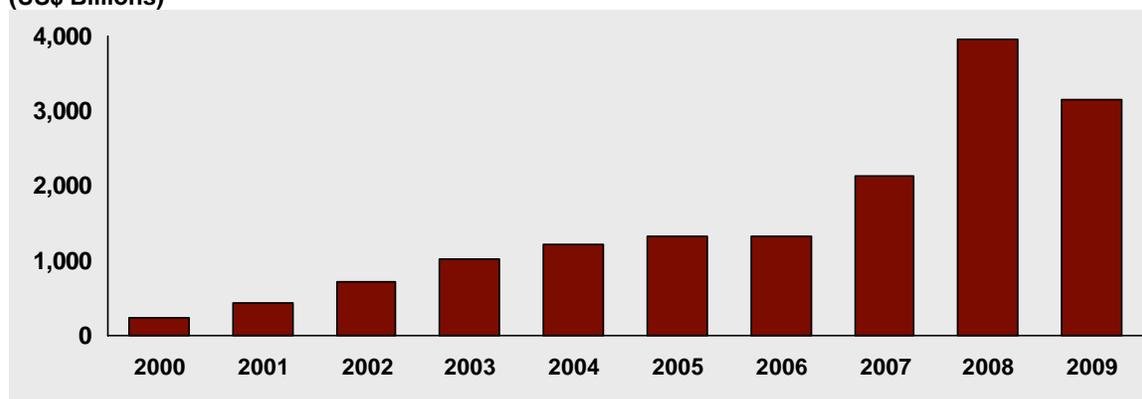


Source: SunGard/Finadium

The Role of Collateral Management for Market Participants

The amount of collateral outstanding for financial transactions rose 15 fold over the last decade, driven by surges in derivative transactions. According to the 2010 ISDA Margin Survey, the estimated amount of collateral outstanding from OTC derivatives transactions was US\$3.2 trillion at the end of 2009 on a double counted basis (see Exhibit 4). This figure is down from its 2008 high of over \$3.9 trillion. Comparing collateral on a single counted basis across multiple products, Finadium identified US\$4.51 trillion outstanding at the end of 2009, with OTC derivatives representing 44% of the total (see Exhibit 5). This figure does not include the global repo market, which could add another US\$3 trillion to US\$8 trillion to the total, nor client margin balances that are not publicly reported in many markets.

Exhibit 4:
Growth of value of estimated collateral in OTC derivatives trades (double counted)
(US\$ Billions)



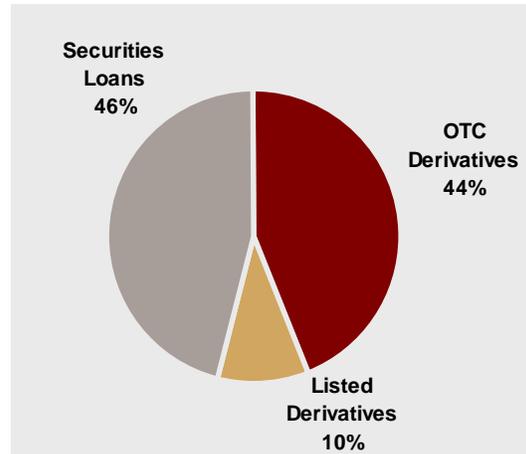
Source: ISDA Margin Survey 2010

This collateral has not always been managed effectively however, and has left market participants exposed to both counterparty and investment risk; the events of 2008 and 2009 proved that collateral management, including a sophisticated

use of technology, is critical for banks, investors and other counterparties to collateralized transactions.

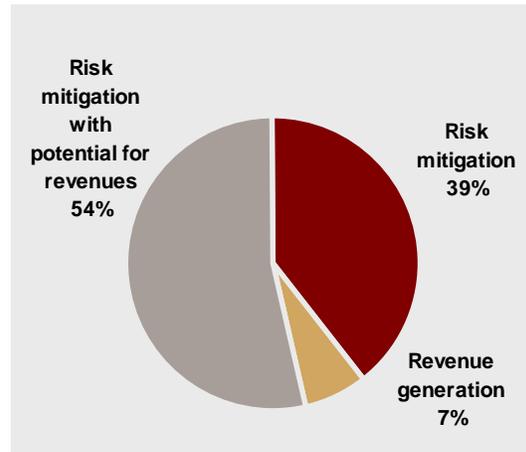
Historically, the main focus of collateral management has been risk mitigation; collateral was seen as a necessary component of a trade but nonetheless created exposure to a counterparty or external market. In our survey, 39% of respondents noted that risk mitigation is still the sole purpose of their collateral management efforts (see Exhibit 6). Collateral management can serve another purpose as well, however: generating revenues for the firm through wise investing or rehypothecation of held assets. An additional 54% of respondents believed that collateral management should be used for both risk mitigation and to generate revenues. Effective collateral management can generate outsized returns on a transaction, whether a securities loan or an OTC derivative, and can assist portfolio managers in managing a variety of risks. The remaining 7% of respondents believed that the main purpose of collateral management was only to generate income.

Exhibit 5:
Collateral outstanding across multiple products (single counted), December 2009
Total: US\$4.51 trillion



Source: Finadium

Exhibit 6:
The function of collateral management for survey respondents (Percent)

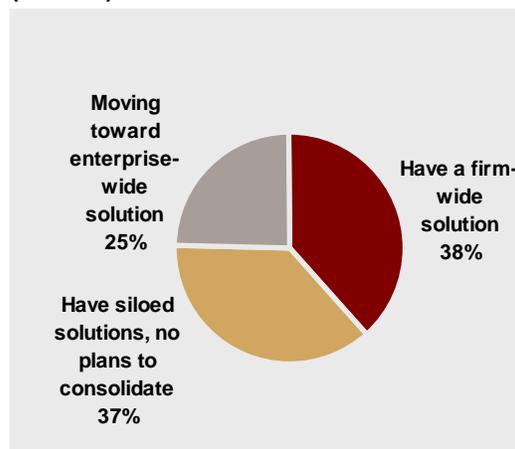


Source: SunGard/Finadium

Internal Decision Making About Collateral Management Systems

For survey respondents, the primary question was whether to move away from collateral management tools for individual business silos and towards a firm-wide solution. From our survey, 63% of respondents indicated that a cross silo view was important for collateral management. Breaking this down further, 38% of respondents said that they already had a firm-wide solution in place while an additional 25% were moving in that direction (see Exhibit 7). 37% said that they currently had siloed solutions with no plans to consolidate.

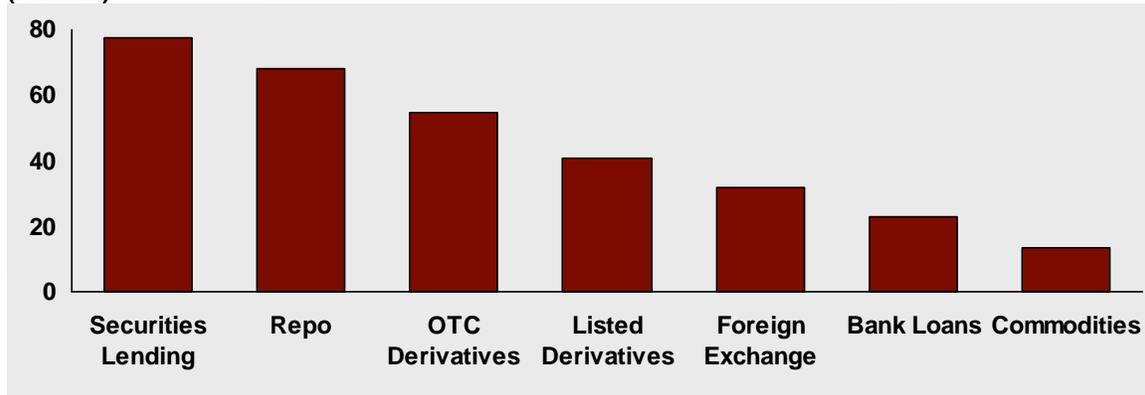
Exhibit 7: Respondents' plans to implement an enterprise wide collateral management technology solution (Percent)



Source: SunGard/Finadium

For the 25% of respondents moving towards a firm-wide collateral management solution, securities lending and repo were by far the most popular targets for consolidation: 77% of respondents planned to consolidate securities lending collateral management and 68% planned to include repo (see Exhibit 8). Over-the-counter derivatives were also being looked at but not to the same degree; 55% of respondents were considering consolidating collateral management in this area. For other business areas intentions were less certain. For example, less than 25% of respondents were looking at collateral management for bank loans with a critical eye, and only 31% were considering foreign exchange.

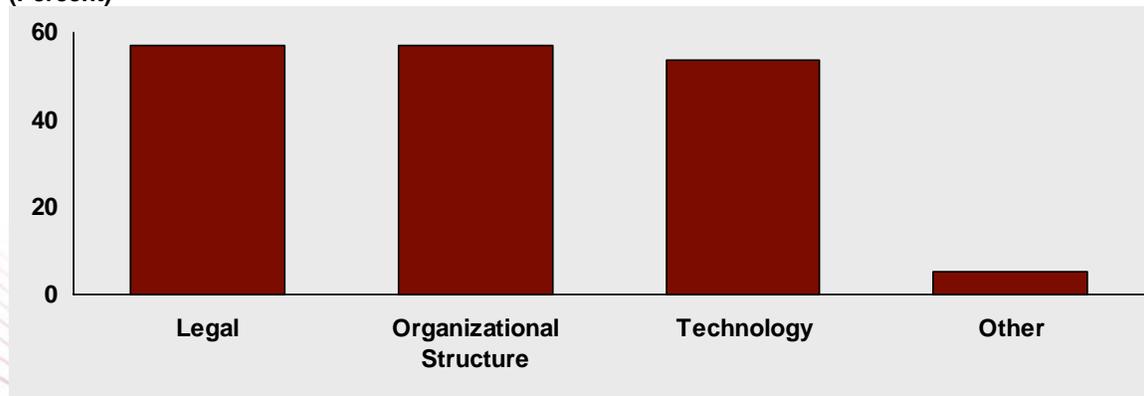
Exhibit 8:
Silos that respondents plan to consolidate for collateral management (Percent)



Source: SunGard/Finadium

While the firm-wide solution is often viewed as the ideal state, is not always realistic to achieve given organizational, operational or technology constraints. The key obstacles to consolidation were evenly split over each of these areas. In a format that allowed respondents to select more than one answer, 57% of survey participants thought that both legal and organizational concerns were the biggest constraint to achieving a firm-wide collateral management solution (see Exhibit 9). 53% of respondents noted technology as an obstacle, highlighting the need for the incorporation of complex risk calculation methodologies in order to effectively support cross-product netting.

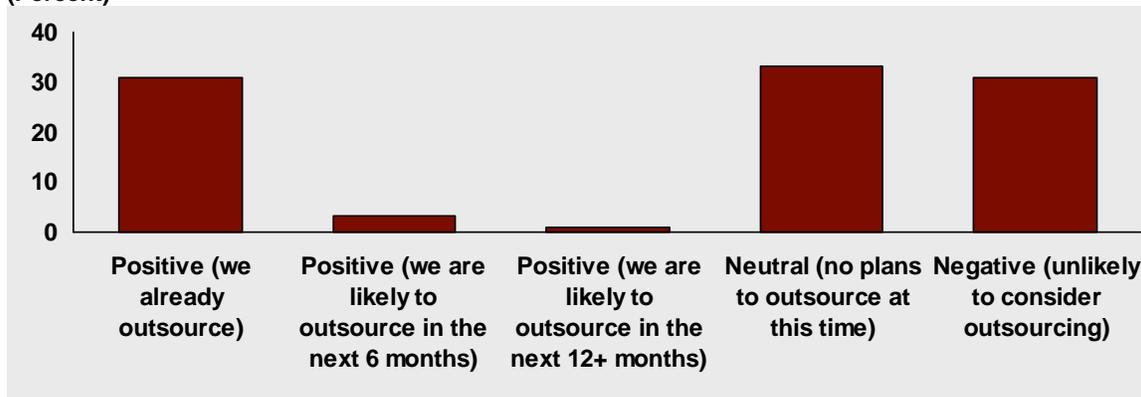
Exhibit 9:
Constraints to full cross-product collateralization (Percent)



Source: SunGard/Finadium

Service providers and custodial banks were particularly interested in user attitudes towards outsourcing their collateral management activity; this has been an area of significant focus for banks and the press in 2009 and 2010. Our survey found that while some respondents thought that outsourcing was just gearing up, around a third of respondents have already outsourced their collateral management processes to a custodian bank or similar outsourcing provider. These respondents were nearly all asset managers. Interestingly, only 4.5% of respondents said that they were planning to outsource collateral management in the next 6 to 12 months for the first time (see Exhibit 10). The only caveat to this response, gleaned from comments entered in the survey, was that if the use of central clearing counterparties (CCPs) grows, outsourcing may become either more necessary or less complicated to implement, depending upon the operational mechanisms.

Exhibit 10:
 Respondent opinions on outsourcing collateral management functions
 (Percent)



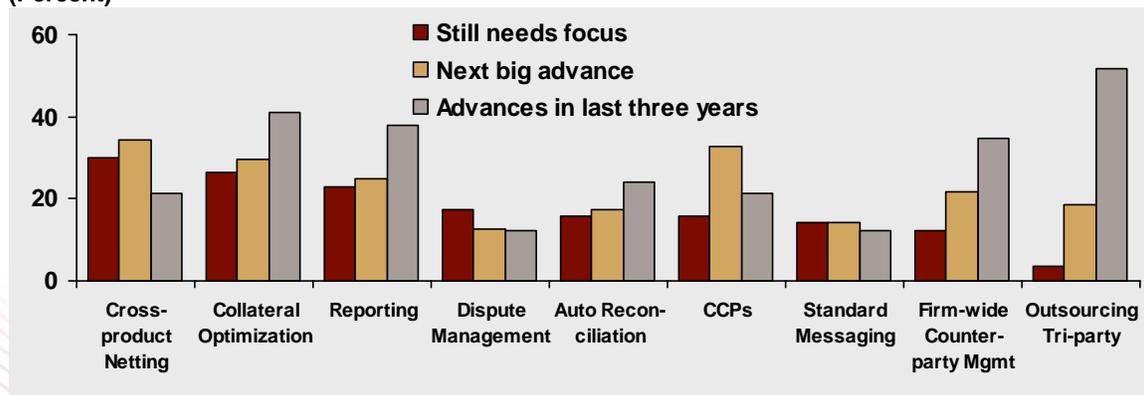
Source: SunGard/Finadium

Industry Advances

An area of particular interest for our survey was where the next big advances might occur in the collateral management space. We contrasted these responses to where survey participants thought that major advances had already occurred in the past three years. The most important issue all around was the cost of capital: cross-product netting, collateral optimization and the use of central credit counterparties (CCPs) were all seen as areas where some advances have occurred but more were to come. ISDA collateral efforts have been the driver of the majority of these advances so far.

In spite of recent improvements, participants thought that cross-product netting and collateral optimization still needed focus, whereas CCPs were largely set up and would advance but did not need much more work at this time (see Exhibit 11). Reporting was also seen as an area where advances had occurred but more were both needed and expected in the future. The responses to this question were often correlated with a respondent’s positive or negative opinions towards CCPs in various markets.

Exhibit 11:
Most important advances in collateral management over the last three years, areas that still require attention and areas where the next big advance will occur (Percent)

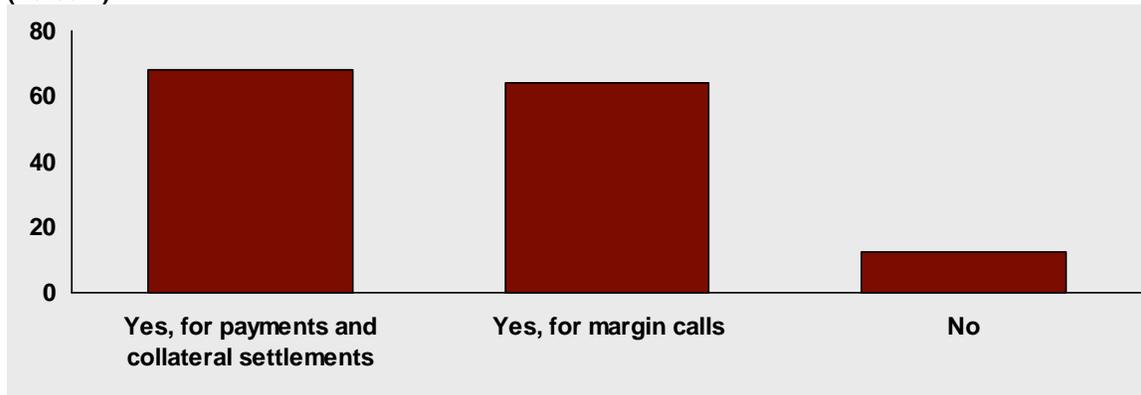


Source: SunGard/Finadium

By contrast, participants said strongly that the conversation about outsourcing and tri-party management of collateral had been played out. While 51% of participants felt that substantial advances have been made in the last three years, 19% thought that this would be an area for further growth and only 4% felt that this area still needed focus.

Respondents continue to be interested in standard messaging as well although to a much lesser degree than managing capital charges: 14% of respondents thought that standard messaging still needed focus on would be the next big advance in collateral management. Still, participants thought that technology should support standard messaging protocols and collateral management for payments, collateral settlements and margin calls (see Exhibit 12), especially as the level of development and adoption of standards can vary substantially by market. Only 12% of participants felt that messaging was not an important part of a technology solution.

Exhibit 12:
Is technology support important for messaging in collateral management?
 (Percent)



Source: SunGard/Finadium

The Impact of Bank for International Settlements Rules and Basel III

In the midst of managing their own work, financial market participants must also respond to different regional interpretations of 'global' regulation that seeks to more formally manage margin and cash requirements. Besides the recent European initiatives including the Alternative Investment Fund Managers Directive and the introduction of UCITS IV, and changes to US regulations found in the Dodd-Frank Act, investors and intermediaries must also pay heed to recommendations coming from the Bank for international settlements (BIS) and the Basel Committee on Banking Supervision. This last group is responsible for publishing the upcoming Basel III guidelines for financial regulators.

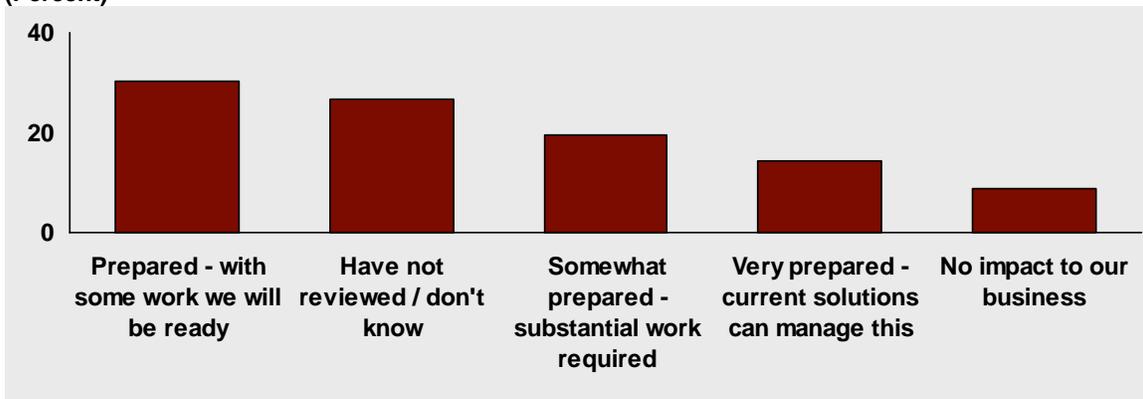
The participants in our survey had a range of reactions to new BIS and Basel III requirements. Recently, the BIS published new recommendations on changes to how banks and investors calculate and collect margin. Like any other regulatory requirements, these changes will require banks in particular to alter their infrastructure. 64% of respondents said that they were somewhat to very prepared for new BIS changes, while 27% said that they had not reviewed the new rules or did not have an answer (see Exhibit 13). Only 9% of respondents said that the new rules had no impact their business.

Respondents had different opinions on the importance of Basel III, expected to be released in the last months of 2010. Whereas the BIS rules were seen as easily managed with some work, new Basel III recommendations could result in a more meaningful impact to the business models of collateral managers, driven by increases in capital charges for certain lines of business. According to respondents, more expensive capital will result in certain businesses being potentially no longer viable and/or may result in trading activity being moved from

bilateral markets to a CCP in order to escape a capital charge (see Exhibit 14). While 39% of respondents felt that there would be no impact, nearly all of these respondents came from asset managers and insurance companies who will be less directly impacted by the new regulations; it is banks that are expecting potentially substantial changes to their business models.

Exhibit 13:

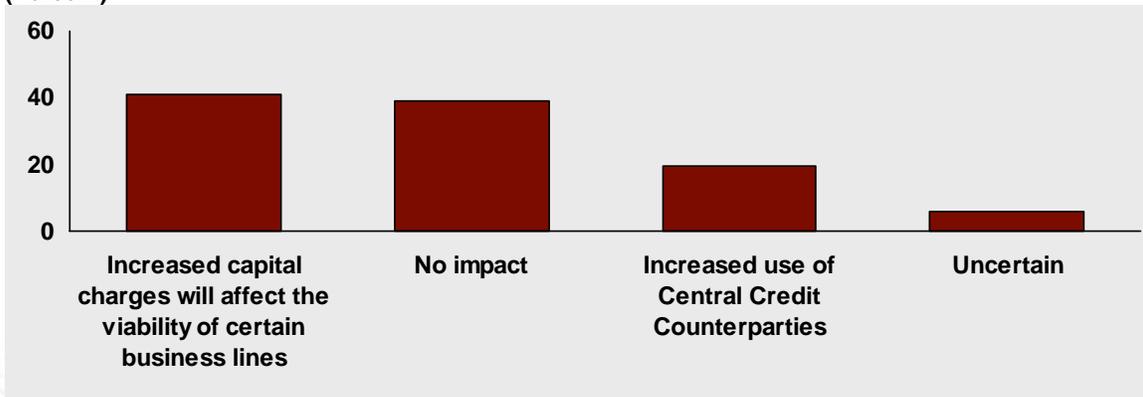
In the recent Bank of International Settlement (BIS) report, “The role of margin requirements and haircuts in procyclicality,” recommendations were made relating to changes around margin calculation and collection process. How prepared is your organization for these changes? (Percent)



Source: SunGard/Finadium

Exhibit 14:

Impact of new Basel III regulatory capital requirements on respondent businesses (Percent)



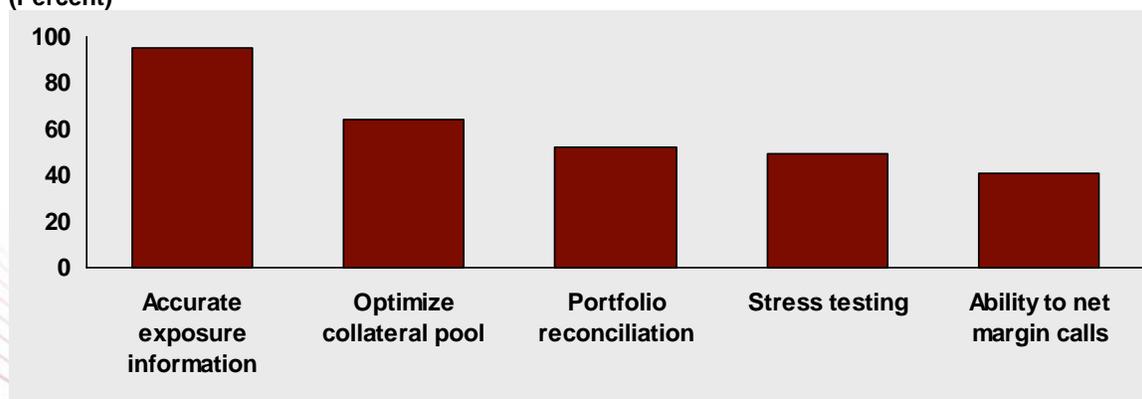
Source: SunGard/Finadium

Collateral Management and Technology: Areas to Watch

While this survey has highlighted several areas of interest and concern for participants in collateral management today, collateral optimization appears to be the most pressing. When looking at outsourcing, the use of CCPs for derivatives trading, or collateral optimization, respondents continue to come back to a central theme: more available and better managed collateral is better for the firm for both risk mitigation and revenue generation. The objective of efficient collateral management cuts across all types of institutions, geographies and job titles, and was highlighted at multiple points throughout the survey.

Technology will be the primary means by which collateral managers can achieve cross-product netting, collateral optimization and management of new BIS and Basel III requirements. And yet, respondents to the survey are not yet highlighting these areas as those most critical in a technology solution. The production of accurate cross-firm exposure reporting was still seen as most important by 95% of participants, collateral optimization was at 64% and the ability to net margin calls was important to 41% (see Exhibit 15).

Exhibit 15:
Importance of selected functionalities in collateral management technology (Percent)



Source: SunGard/Finadium

We expect that this emphasis will substantially change over time as the need for cross-firm collateral reporting is more widely available, cross-silo integration of collateral management becomes an industry norm, and asset optimization becomes more of a mandate for market participants. These are the next major area to watch in the development of the collateral management industry.

About Finadium LLC

Finadium is a research and consulting firm focused on asset servicing in financial markets. The firm assists asset managers, pension plans, hedge funds, brokers, custodians and technology firms with understanding market dynamics and in maximizing the effectiveness of their resources. Finadium research is available on a subscription basis. In its consulting practice, Finadium works on vendor selection and evaluation, product development and market analysis. For more information, please visit www.finadium.com.

SunGard commissioned Finadium to conduct an online survey and analysis of collateral management practices in financial markets. The content of this report is the product of Finadium and is based on independent, unbiased research not tied to any vendor product or solution. Although every effort has been taken to verify the accuracy of this information, neither Finadium nor SunGard can accept any responsibility or liability for use of any of the information, opinions, or conclusions set forth in this report.

