Bankers now look not only to maximize profit, but also to avoid unexpected loss events and to minimize compliance costs. Furthermore, the global crisis showed that risk cannot be contained within individual business silos, but is present across different functions of the enterprise and closely connected to the bank's capital and credit metrics. Risk monitoring systems are therefore increasingly integrated with front-line business operations.

Stress testing has become a particularly hot topic, given the ongoing US adaptation of Basel III and the expansion of the Dodd-Frank Act's coverage to all banks with over $10bn in assets. The largest U.S. banks have been required to submit stress test results for several years, and this past year, all banks between $10bn and $50bn in assets were also required to formally submit stress test results to their primary regulator. These smaller banks are now following the larger banks' lead in formalizing their organizational frameworks, investing in the necessary infrastructure for stress testing, improving analytical capabilities, and fine-tuning their risk management programs.

In the current regulatory landscape, banks can gain a competitive advantage by preparing a solid foundation for their ongoing stress testing program. Improving data accessibility, system integration, and collaboration across the different business silos all require a long-term effort. Banks that have already been investing in these areas are one step ahead of the game.

To shed light on industry trends and bankers' sentiments, FIS' Ambit Risk Institute conducted its fourth annual Trends in Risk Management survey, asking over three hundred financial services practitioners across the globe about the key capital and risk management issues they face and those they anticipate over the next 12-18 months.

This report focuses on the key findings from our U.S. respondents:

- U.S. bankers identify capital planning as the top risk management priority.
- Institutions are prioritizing business applications of stress testing to achieve growth and profitability.
- The majority of bankers responded that their biggest concern in the current environment is reaching profitability targets within the bounds of their organization's risk appetite.
- While organizational structures for stress testing have improved, an overwhelming number of institutions are increasingly challenged by data accessibility, data integrity, and system integration.
- Organizations required to conduct regulatory stress tests identify a different set of benefits from their stress testing program, compared to other organizations:
  - Institutions required to conduct regulatory stress tests find stress test results most helpful for capital planning and risk appetite setting decisions.
  - Many institutions that are not mandated to formally submit stress test results find stress testing helpful for portfolio-level credit and concentration risk management.
- Nearly 40 percent of bankers required to submit formal stress testing results to regulators said that they have plans to increase the risk management budget by 10 percent or more over the next 24 months.

The results of the survey highlight the importance of stress testing in the industry; there is a general consensus that the next priority is to make sure stress results have an effect on day-to-day operations. Furthermore, organizations that have conducted stress testing are already seeing improvements in their enterprise-wide risk management and business decisions.
Key findings

Top risk priorities
Our first question assessed bankers’ priorities in relation to a wide range of risk management initiatives. Capital planning, asset liability management, and enterprise-wide stress testing turned out to be the top priorities this year, with capital planning ranking the highest. The attention given to capital planning is unsurprising, given the current regulatory and industry focus on the topic.

Enterprise-wide stress testing continues to be an important priority but it is slowly moving down the rankings as business applications – such as capital planning and loss forecasting – take priority. Meanwhile, many organizations that have several years of regulatory stress testing under their belts have started applying the results to their detailed business operations.

Asset liability management, interest rate risk and balance sheet optimization, ranked second on the list, taking the spot occupied last year by enterprise-wide stress testing. The higher priority reflects concerns about the uncertain rate environment, especially at institutions with less than $10bn assets. These smaller institutions often face significant margin pressure on both sides of the balance sheet. As recovering markets are expected to swing record-low interest rates to new directions, bankers are worried about the impact of a rate rise on funding costs and net interest margins. In addition, many larger organizations that traditionally relied heavily on short-term funding are likely to have to continue battling both capital surcharges and liquidity costs until their business models adapt to the current regulatory landscape.

Loss forecasting and allowance methodology enhancement, an area that has recently been under the spotlight due to the Financial Accounting Standards Board’s (FASB) development of its current expected credit loss (CECL) model, also ranks high on bankers’ priorities this year. The rapid climb the ranking reflects the attention the banking industry is giving to FASB’s proposed changes to the calculation of banks’ allowance for loan and lease losses (ALLL). While the final verdict on the regulatory requirements is yet to be announced, a mandatory implementation of a more sophisticated, forward-looking model for allowance calculations will have a far-reaching impact on financial institutions accustomed to the current incurred loss approach. We expect this to be an area of continuing focus across the banking industry this year.

19 CCAR banks in 2012 and the codification of the liquidity coverage ratio (LCR) rules, we expected many smaller banks to follow their larger peers and to initiate liquidity stress tests designed to improve contingency funding in an uncertain economy. However, the downward trend of liquidity risk’s importance is likely driven by a few factors: capital planning and balance sheet optimization is still the most pressing priority for bankers, and the uncertainty around the financial LCR requirements has been removed, allowing banks to put plans in place to address the regulatory requirement.

With institutions now integrating their stress test framework into daily operations, new priorities are also climbing up the ladder. Our survey results show that many respondents, informed by better risk reporting systems, are paying more attention to performance metrics. For example, many institutions are prioritizing ways to optimize risk-adjusted profitability and relationship pricing. Management is also incorporating findings from stress testing into risk appetite frameworks by defining explicit risk thresholds at the top-of-the-house level. To maximize benefits, bankers should actively compare stress test results against agreed internal loss tolerances, calibrating their capital metrics and frequently communicating them to lower levels of the organization.

UNITED STATES RISK PRIORITIES 2015
(2014 RANKING IN BRACKETS)

1. Capital planning (1)
2. Asset liability management, interest rate risk and balance sheet optimization (5)
3. Enterprise-wide stress testing (2)
4. Loss forecasting and allowance methodology enhancement (13)
5. Liquidity risk management (4)
6. Risk-adjusted profitability and relationship pricing (12)
7. Risk appetite framework (11)
8. Model validation and review (9)
9. Regulatory capital adequacy (6)
10. Credit portfolio optimization (5)
11. Operating risk measurement (10)
12. Corporate governance assessment and peer benchmarking (8)
13. Market risk for the investment/trading books (7)
14. Economic capital (14)
Top industry worries

The next question in our survey sought to identify the respondents’ top worry in the current environment (Chart 1). Institutions with assets below $10bn focused on concerns over growth and profitability, a response that underscores the difficulty of increasing business volumes in current economic conditions.

Interestingly, compared to the previous year, banks in the $10-50bn asset category migrated from being almost equally split between growth and profitability concerns to being more heavily focused on reaching profitability targets within their risk appetite. These banks went through their first mandatory regulatory stress tests this year; many of these bankers are updating their risk appetite statements using explicit goals, limits, and thresholds informed by their stress testing results.

The attention given to profitability is largely expected, given that net interest margins are at historical lows across the industry and increased regulations are driving up noninterest expenses. Bankers are looking to identify noninterest revenue sources and to cut down excessive operating costs through more precise profitability measurement.

Institutions with over $50bn assets responded much in line with last year’s results. Their top worry in the current environment is the uncertainty surrounding risk management regulations. These firms bear the brunt of regulatory implementation, and inevitably manage the largest number of databases and models. Over the last few years, regulatory reforms have forced these institutions to devote a large amount of resources to data collection, modeling, validation, and organizational restructuring. Since bankers in this space have already experienced how expensive new regulations can be, it is understandable that they worry about further regulatory change. In the future, concern will also rise among smaller organizations that could face similar regulatory requirements but that do not have the same war chest of resources.

Chart 1: Top worry as a banker in the current environment
This year’s survey also reveals a rise in concern about the organizational and infrastructural challenges that inhibit collaboration and data sharing within firms, with the percentage of respondents citing this as a top worry almost doubling year on year (Chart 2). In particular, a plurality of institutions that submitted regulatory stress testing results for the first time this past year newly identified this to be a significant concern. Regulatory impetus is forcing these banks to confront the challenge of centralizing data and building the resources necessary for enterprise-wide risk management.

For the second year in a row, bankers said that data handling and analytical capabilities were their principal challenges when conducting stress testing (Chart 3), together with uncertainty about regulatory expectations.

Improving data collection is a critical consideration for most institutions that have recently reassessed their risk management practices. A closely related and equally important issue is the accessibility of the data, which is often archived at various levels of the organization. Bankers have to navigate through hundreds of spreadsheets and reconcile data from software offered by various vendors.

**Top challenges when conducting stress tests**

For the second year in a row, bankers said that data handling and analytical capabilities were their principal challenges when conducting stress testing (Chart 3), together with uncertainty about regulatory expectations.

Improving data collection is a critical consideration for most institutions that have recently reassessed their risk management practices. A closely related and equally important issue is the accessibility of the data, which is often archived at various levels of the organization. Bankers have to navigate through hundreds of spreadsheets and reconcile data from software offered by various vendors.
Alternatively, adopting a central information system that houses data from all levels of the organization allows firms to maintain consistent data inputs, share information across business units, and easily create a big picture narrative. Inevitably, larger institutions with over $50bn assets have more siloed operations, and these firms will continue to struggle to manage large amounts of internal data, system integration, and accessibility. Many smaller institutions with under $10bn assets have the opposite problem, namely, having too few data points to build a robust stress testing process. We zoomed in on the $10bn-$50bn asset category to investigate the trends among the banking institutions that submitted their first stress test results this past year (Chart 4).

**Institutions that have devoted minimal resources to stress testing compliance in the past tend to find they face significant data and system constraints further down the regulatory path.**

Intuitively, we might predict these organizations to follow the earlier survey response trend of firms with over $50bn assets, as these larger firms now have a few years of stress testing experience under their belts. As expected, internal data issues have become their foremost concern, followed by the challenge of establishing analytical capabilities to create models and methodologies. Bankers in this space are finding out that sophisticated analytics, data robustness, and system integration are areas that demand a significant amount of time and expense.

We also found that the number of institutions saying that organizational staffing was their biggest challenge—previously ranking second, after the challenge of analytical and modeling capabilities—fell drastically compared to last year. The worries have shifted mostly towards data issues and the problem of collaboration across business silos. This result was in line with our expectations, as staffing worries were bound to subside after a full year of implementing regulatory stress testing.

On the other hand, effectively integrating practices across different silos, given their long-standing business cultures, is difficult to achieve in a short period of time. Aligning cultural and organizational behaviors around stress testing represents a continuing effort.

Meanwhile, bankers’ efforts are moving on from constructing broad stress-testing frameworks for the organization to integrating databases and calibrating the fine dials in the stress testing machine. As stress testing processes increase in sophistication, the industry will continue to focus on ensuring the integrity and validity of its data and underlying assumptions. We anticipate that model calibration and validation will be an increasingly important focus in coming years.

**Chart 4: What was the biggest challenge in conducting a stress test ($10-50bn asset banks)?**

- Analytical capabilities to create rigorous models and methodologies: 35%
- Communication of stress testing results to all levels of the organization (reporting): 30%
- Cultural tendencies that inhibit collaboration across silos: 25%
- Internal data integrity, accessibility and system integration: 20%
- Organization staffing (data analytics team, system managers, etc.): 15%
- Overly judgemental or qualitative processes in risk rating, loan decisions, risk appetite, etc.: 10%
- Uncertain regulatory expectations around appropriate level of sophistication: 5%
Benefits of stress testing

We asked our respondents to identify the areas in which stress testing benefits their business (Chart 5). Interestingly, we found that small and mid-tier organizations differ in their views. As was the case last year, many organizations below the $10bn asset threshold consider the top benefit to be the ability to maintain a forward-looking view of the organization’s risks.

However, more than one third of institutions with assets between $10bn and $50bn answered that the foremost benefit is that stress testing informs capital planning, capital deployment, and capital distribution. This is a significant migration of institutional thinking, from believing that stress testing helps to anticipate “the organization’s risks” to believing that it can serve as a custom tool to assist with strategic decisions at the highest levels.

Chart 5: Top benefits of implementing stress testing

<table>
<thead>
<tr>
<th>Area</th>
<th>&gt;10BN</th>
<th>10-50BN</th>
<th>&gt;50BN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inform capital planning, capital deployment and capital distribution (including M&amp;A)</td>
<td>35%</td>
<td>30%</td>
<td>25%</td>
</tr>
<tr>
<td>Inform capital decisions, underwriting criteria and pricing</td>
<td>5%</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Maintain a forward-looking view of the organization’s risk</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Quantify and manage portfolio concentration risk</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Stress key metrics formally defined in the Risk Appetite Statement</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Understand the macroeconomic environment and its impact on the organization</td>
<td>0%</td>
<td>10%</td>
<td>15%</td>
</tr>
</tbody>
</table>
Very few bankers in this industry segment are concerned with portfolio-level applications such as concentration risk management. This ranking of importance is reversed as we turn to look at smaller institutions. Organizations below the $10bn asset threshold place a higher weight on the benefits of stress testing for portfolio-level concentration risk assessment and lending decisions.

Institutions with more than $50bn in assets have a more balanced view on the benefits of business-specific and top-of-the-house views. However, compared to organizations of different asset size, the bigger firms, with more stress testing experience, tend to prioritize benefits that affect the organization across different business silos. Notably, many institutions above the $50bn asset threshold answered that the top benefit of stress testing is that it helps them define stressed metrics in their risk appetite statements (Chart 6).
Approximately half of the respondents answered that the Chief Risk Officer (CRO) or the Head of Enterprise Risk Management manages stress testing in their organization; most other respondents answered that it is headed by the CFO or SVP of Finance. This shows that the majority of the larger firms have identified the key role that stress testing can play in enterprise-wide risk management, and that these firms have already positioned their organizational structures to increase the use of stress testing in capital and profitability decisions.

To investigate which part of the organization benefited most from stress testing, we asked who the business owner for stress testing was in each organization. In the case of the bankers not mandated to perform regulatory stress testing, more than 20 percent answered that the process is currently owned by their credit risk function (Chart 7). This siloed approach is in line with the previous finding: smaller institutions find stress testing useful in managing portfolio-level credit and concentration risk.

On the other hand, almost all organizations above the $10bn asset threshold answered that stress testing is owned by offices heading the organization’s enterprise-wide risk management or capital planning efforts.
Many bankers from institutions that are not mandated to run regulatory stress testing replied that they expect less than a 5 percent increase. However, the majority of institutions that have at least two years of stress testing experience responded that they plan to increase the budget by at least 10 percent, with over 20 percent answering they will increase their spending by more than 30 percent. Nearly 40 percent of the institutions required to submit formal stress testing results replied that they plan to increase their risk spending by 10 percent or more.

Risk management spending and regulatory trends

This year’s survey found that an overwhelming number of financial institutions expect to increase their risk management spending over the next two years. Moreover, there was a clear correlation between the size of the organization and the expected increase in risk budget (Chart 8).

Chart 8: How much do you expect to grow the risk management budget (e.g., additional hires, internal development, external consulting, data systems) over the next 24 months?
Evolving regulations, data integrity issues, and the need to build more sophisticated models are all driving large financial institutions to increase spending on risk management. Smaller institutions are following the same trend, and we expect to see larger increases in budget for organizations below the $10bn asset threshold as regulatory requirements and industry standards trickle down. Lastly, we asked bankers about the top trends they expect to see in financial regulation over the next 12 to 18 months (Chart 9).

A plurality of institutions, regardless of asset size, answered that they expect requirements to continue to cascade from larger to smaller institutions. In addition, many bankers at larger institutions think that regulatory expectations will rise with regard to risk management sophistication and rigor. Given that the larger institutions are in the frontline of the regulatory evolution, it is not surprising to also find that many smaller organizations are planning to increase their risk management spending in preparation for a possible tightening of the rules.

Chart 9: What top general trend do you see financial regulations taking over the next 12 to 18 months?
Concluding remarks

Risk management is no longer treated as if it were an isolated cost center. Regulations are pushing risk management across all business silos and also down into the business line, as well as requiring financial institutions to align their risk assessments with a more forward-looking view. In this environment, stress testing is more important than ever. We anticipate that regulators will continue to shift the industry’s focus from credit losses to the wider balance sheet, encouraging banks to improve forecasting in areas such as business volumes, non-accrual rates, ALLL, and non-interest revenues.

Regulators are also turning their attention to areas that have not been as front-and-center. Many organizations will have to overhaul the modeling process for their required reserves in the near future. New accounting guidelines, expected to be finalized this year, around the current expected credit loss (CECL) model for ALLL calculations will lead to significant changes in the way bankers approach their allowance processes. The still-evolving regulatory landscape promises to be as challenging over the next year as it has been in the last.
About FIS’ Ambit Risk & Performance
FIS’ Ambit Risk & Performance Management suite of solutions gives you a centralized view of risk, liquidity, capital and profitability across the enterprise so that you can be prudent in your decision making yet strategic for maximized returns. Ambit Risk & Performance Management offers modular solutions for asset liability and market risk management, liquidity risk management, regulatory compliance and economic capital management, operational risk management and credit risk management.

About FIS
FIS is a global leader in financial services technology, with a focus on retail and institutional banking, payments, asset and wealth management, risk and compliance, consulting and outsourcing solutions. Through the depth and breadth of our solutions portfolio, global capabilities and domain expertise, FIS serves more than 20,000 clients in over 130 countries. Headquartered in Jacksonville, Florida, FIS employs more than 55,000 people worldwide and holds leadership positions in payment processing, financial software and banking solutions. Providing software, services and outsourcing of the technology that empowers the financial world, FIS is a Fortune 500 company and is a member of Standard & Poor’s 500® Index. For more information about FIS, visit www.fisglobal.com