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# Silver Lining: Finding Opportunity in Regulatory Obligation - Stress Tests Outcomes Provide Data that Create Long-Term Value

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Executive Overview .....	1
Introduction .....	1
A Greater Return .....	3
Beyond Compliance .....	4
Decision Making in Real Time .....	5
Conclusion .....	7

## Executive Overview

Stress test data holds incredible value and must be provided in a useful format to senior leaders and boards of directors to help drive decision making. Stress tests are more than a rigorous regulatory exercise, and financial institutions should ensure that leadership is able to use the data for its own coordinated analysis of risk exposures. Not only will this prudent approach help senior leaders and directors optimize bank performance and profitability going forward, it means they will get a greater return on investment from their substantial stress tests expenditures.

## Introduction

Six years after the onset of the 2008 financial downturn, financial institutions are reconciled with the fact that more rigorous and frequent stress testing is here to stay. Despite such acceptance, stress tests remain far from routine for most institutions.

In late March 2014, the U.S. Federal Reserve announced the results of the most recent annual stress tests, and they revealed some interesting trends. This year, the Fed rejected the capital plans of five banks, and the reasons why surprised many. All but one institution met the capital requirements. The Fed called out the other four due to their regimen for running tests and plans to deal with a severe downturn.

It is clear that the Federal Reserve is taking a more rigorous approach to stress testing, and banks of all sizes are wise to take note and take action. As banks garner their resources to ensure compliance with increasingly demanding standards, they should also find ways to put this investment to work to enhance the overall performance and profitability of their organizations.

In many cases financial institutions remain focused on simply fulfilling the regulatory requirements of stress testing, and overlook an important opportunity to use the information

gathered through these labor-intensive efforts to peer into their operational DNA and drive their institutions forward. Finding new ways to use this information as a proactive and dynamic management tool will help leadership gain new perspectives, improve decision-making, and provide financial institutions with long-term value.

The hurdles to achieving this goal are cultural and technological, but hardly insurmountable for today's institutions. With banks on their way to mastering stress testing fundamentals, now is the time to turn attention and focus to advanced learning.

“Although primarily thought of as a way to fulfill a regulatory mandate, stress tests are analytical tasks that can lead to valuable insights for bank management.”

— David O’Connell, Aite Group LLC, The Global Stress-Test Automation Market: Stress, Uncertainty, and Moral Hazard, September 2013

## A Greater Return

No longer just a check-the-box exercise to fulfill regulatory obligations, stress tests represent a complete dissection of a financial institution’s multiple risk types – including credit, market, operational and liquidity risk. Regulators are not the only ones who can benefit from this valuable data.

The information also provides an enormous opportunity for senior leadership and boards of directors if the information unearthed through these deep dives into bank data is used to drive and refine management strategies moving forward.

Financial institutions dedicate enormous capital and human resources to fulfill their regulatory stress testing obligations imposed by Comprehensive Capital Analysis and Review (CCAR) and Dodd-Frank Act Stress Test (DFAST) requirements. Furthermore the core capital and liquidity requirements under Basel III are much more stringent than ever before and cumulatively will drive overall compression in margins and profitability. Thus, it becomes imperative and prudent to maximize the value of stress test data output by using it to guide practical internal decision-making.

Today banks need to be seen to be running a range of stress scenarios with varying complexity, otherwise regulators will more likely take a more intrusive and invasive review of how well the bank is safeguarding its franchise.

Realizing this important change will first require a significant cultural shift.

Fundamentally, it means ensuring that information gleaned from stress tests continues to flow unimpeded from the bottom all the way up the chain to the board of directors level, and that leadership mandate the use of data at all levels to drive strategic and operational decisions.

Stress test outcomes, however, have been put to limited use at the highest levels of financial institutions, as the reports and data, historically, were treated as an “information only” item at board meetings.

Where stress tests are benchmarked against limits and these limits are breached, what does this really mean? Does a breach initiate the right type of discussion and ensure that the right questions are being asked?

In light of this reality, stress test information must become a leadership pillar and fundamental focus of board meetings as opposed to being reviewed as simply another agenda item. More organizations are considering setting dedicated board meetings that focus solely on analyzing stress test findings and how it can be used in strategic planning.

While leadership has and must be inherently involved with the results and regulatory impact of stress test results, it has historically been difficult to operationalize that information to safeguard the bank's business model, and as such, the responsibility to interpret and report the data has been left to others.

These barriers must come down to optimize use of this valuable data.

Simply put, banks must be able to present information and analysis gleaned from stress tests in a way that is understandable and actionable. However, the volume and technical nature of the data make this difficult, thus it is critical that banks get a transparent view of stress tests across the enterprise.

In a highly regulated environment where reporting has become more onerous, many financial institutions devote armies of employees to fulfilling the regulatory obligations outlined by the CCAR, DFAST, and Basel requirements, which in the longer term is not cost-effective and is of limited value.

## Beyond Compliance

How senior leadership and directors use the detailed information collected through stress testing is as important as having the data. But once in the hands of leadership, stress testing provides them the ability to conduct important analysis. Financial institutions must grasp that connection between stress testing data and improved operational performance.

In addition to meeting stringent regulatory requirements, leadership can use stress test outcomes internally to improve forecasting, determine their risk appetite, evaluate the adequacy of a risk management framework, establish a recovery plan, and engage in crisis simulation.

Rather than looking at the narrow impact of a stress, CCAR, DFAST, and Basel III requirements give leadership an opportunity to have an incredibly broad dynamic view of the impact of a stress scenario on an institution's balance sheet and income statement across a range of risks, including interest rate risk, trading risk, operational risk, capital risk, and liquidity risk.

For example, stress test data can reveal undetected hypersensitivities of a loan portfolio to macro-economic factors. A bank can also use stress-test-related tools, such as data marts and ad hoc reports, to identify how well its risk profile aligns with management's intended profile and analyst projections. With data scattered across so many different applications, an enterprise-wide analysis of risk is a rare opportunity to objectively assess all risk positions.<sup>1</sup>

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<sup>1</sup> Aite Group LLC. "The Global Stress-Test Automation Market: Stress, Uncertainty, and Moral Hazard," September 2013.

### Optimize Return on Stress Test Investment

Beyond meeting regulatory requirements, financial institutions can also use stress test data to:

- Improve forecasting
- Determine risk appetite
- Align risk profiles with leadership's intended profile
- Establish a recovery plan
- Engage in crisis simulation
- Determine the impact of a stress scenario on an institution's balance sheet and income statement across a range of risks

Delivery of stress test outcomes at multiple levels using both a top-down and bottom-up approach is critical to unearth hidden risks or “blind spots.” Such blind spots could emanate from a certain line of business or subsidiary making profits or returns in excess of expectations, which could be jeopardized if certain risk factor correlation assumptions or sensitivities are undermined or not fully captured. Stress tests should facilitate the analysis of the broader ramifications of a stress scenario – the secondary and tertiary effects – and guide the institution’s response.

Because risk affects a financial institution’s reputation, stress testing can help institutions flag potential problems that may threaten the bottom line or subsidiaries abroad. Further, running virtual crisis scenarios also can help financial institutions anticipate potential problems and guide leadership by helping them consider hypothetical responses.

This is the new imperative. Stress testing should no longer be viewed only as a tool for regulators to measure an institution’s ability to withstand a global financial crisis. While that is the goal of this rigorous testing environment, the potential benefits of testing are much greater.

Leadership must have access to easily understandable stress test outcomes to help them comprehend the dynamics of a stress scenario, grasp the range of options available, take appropriate action, and ensure the organization remains viable going forward. This information can help the leadership team begin to answer challenging, but vital, questions, including what scenarios should the board be focusing on? Is there one central scenario or should they be focusing on three or four? What about near misses?

## Decision Making in Real Time

Advancing stress test data to the boardroom requires more than changes in culture and process. There is an IT component to solving this problem and ensuring that data is delivered quickly and in a standardized format.

Running stress tests remains a slow, cumbersome, and “clunky” process at many institutions, as they live with a disparate environment filled with internal home-grown and third-party risk systems that were deployed one off over the years in response to new regulatory requirements or market threats. In addition to having multiple systems to manage credit, market, liquidity, operational, and other risks, institutions often have separate risk environments for each division, region, and even line of business. Some large banks have more than 100 separate risk management point solutions.



These siloed solutions cannot deliver the enterprise visibility that financial institutions require to understand and act on risk across their enterprises. They also cannot effectively illuminate the correlations between risk types, such as market and credit risk. Further, enterprises cannot uniformly apply tests, and they struggle to take into account varying degrees of events across all risk silos – yielding an inaccurate or incomplete picture.

For institutions, there is no end in sight to the complexity quagmire as stress tests are revised more frequently in an attempt to account for increasingly dire economic scenarios. In addition, regulators are likely to conduct stress tests more frequently in the future and design tests for specific financial institutions as they probe for weaknesses unique to a bank.

For many, extracting the most utility out of stress test data will require creating a fully automated and integrated environment that improves data extraction and aggregation enterprise-wide and ensures the consistency of balance sheet data, risk data, market data, and qualitative data.

Forward-thinking financial institutions understand that this transformation to an enterprise-wide platform is as much about increasing visibility and improving decision making for senior leaders and directors as it is about fulfilling CCAR, DFAST, and Basel compliance obligations. Having the ability to produce critical data on-demand holds great value for directors and senior leaders. There is a precedent. High frequency trading allows hedge funds to maximize arbitrage trading opportunities and assess the risk in nanoseconds. While this level of speed is not required for a bank's stress testing program, this "real time" view offers greater insight into the immediate and longer term impact of any particular stress scenario and allows for a faster defensive response during periods of heightened market volatility.

Building this foundation to provide institutions with real-time visibility, flexible analysis, and a reporting capability to leverage test results in strategy development and long-term planning efforts requires key elements to ensure its effectiveness:

- **Unified data model:** A unified data model supports the convergence of risk and finance across the enterprise. To truly benefit from stress tests and incorporate them into operational strategies, banks must be able to translate stress test scenario results into balance sheet impact. As banks also seek the ability to better analyze and project risk-adjusted performance, they require a data model – purpose-built for the financial industry – that supports both risk management and finance operations
- **Comprehensive risk and shocks library:** A comprehensive and centralized library of risk variables and shocks should encompass all variables that can have an impact on income and balance sheets. These should include internal risk variables, such as loan prepayments, as well as external factors such as inflation. When housed in a centralized library, banks can apply these variables consistently across the institution. It should also include shocks related to market movement, energy prices, gross domestic product trending, and more.
- **Scenario automation capabilities:** Banks must be able to quickly create complete and varied scenarios and store them for replication and future use across the enterprise. This centralized library approach helps ensure consistent scenario application across a bank's various risk

environments. It also enables institutions to respond quickly to increasingly frequent regulatory requests. Scenario automation should also support reverse stress testing capabilities, which model risk, economic, and performance scenarios that would result in insufficient capital reserves.

- **Flexible analytical capabilities:** This capability provides executive staff and line of business users the ability to drill down into the numbers to better understand them and their impact on the business and balance sheet. This data must allow personnel at all levels to conduct analysis at multiple levels and have “what-if” modeling capabilities, such as Monte Carlo analysis, which generates large numbers of reverse stress tests so that the most realistic ones can be selected as bank-specific down-case scenarios<sup>2</sup>.
- **Comprehensive and automated reporting:** Analysis must provide leadership with information in a usable format. Traditionally banks have hundreds of people working to aggregate stress testing data for reports, creating a tremendous operational burden and slowing processes. Banks seek a risk management environment that enables them not only to process huge volumes of data rapidly, but also to quickly develop usable reports and analyze the findings to satisfy regulatory requirements and, as important, promote stability, and preserve profitability.

## Conclusion

Too many financial institutions view stress testing purely as an obligation. While compliance is a heavy burden, financial institutions would do well to take the next step and use data more effectively as an interactive tool to boost performance and profitability.

Giving leadership data they can understand and analyze will contribute to efforts to improve operations and ensure an organization’s long-term viability. This will require big changes, but stress testing requirements should serve as motivation for this transformation. The opportunities presented by this treasure trove of data simply are too great to ignore.

At the most fundamental level, it makes financial sense to get as much value out of efforts to compile stress test data as possible. Using data gathered to compile stress tests results in a greater return on that substantial investment.

Advancing stress test data from the conference room to the boardroom gives leadership the best information available to make critical business decisions. This change will drive long-term value.

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<sup>2</sup> Aite Group LLC. “The Global Stress-Test Automation Market: Stress, Uncertainty, and Moral Hazard,” September 2013.

Financial institutions must understand the role that stress test outcomes have in improving internal decision making, long-term planning and risk assessment. If firms can transform their ability to compile stress test data into a useful framework that allows leadership to strengthen their analytical capabilities, their organization and shareholders will see dramatic benefits.



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