A SAS Executive Summary

Stressed Out?

How US and European banks are responding to regulatory stress tests

Longitude

SAS
THE POWER TO KNOW.

For many financial service institutions in the US and Europe, stress testing is now a fact of life as regulators seek to avoid any repeat of the 2008-09 financial crisis. Since the US Federal Reserve introduced the Comprehensive Capital Analysis and Review (CCAR) process in 2010, supervisory expectations for all aspects of capital requirements have been significantly heightened for the largest and most complex US banks with assets of US$50 billion or more.

In its CCAR 2013 review document[1], the Fed cited current practices by bank holding companies and outlined best and suboptimal practices. Additionally in 2013, a complementary exercise – the Dodd-Frank Act stress testing (DFAST) – was initiated to provide a forward-looking review of capital adequacy for banks with $10 billion or more in assets. In Europe, the picture is similar, with the European Banking Authority overseeing an EU-wide stress test exercise that has run annually since 2009 and covers at least 50 percent of each national banking sector – spanning 124 banks in 2014.[2] In the UK, the Bank of England is running an extended variation of the EU stress tests.[3]

As regulators refine and improve their approach and methodologies, banks must now respond to more stringent compliance requirements for creating sound and robust capital plans and adhering to stress testing mandates.

The impact of these stress tests, in combination with a swathe of other financial services regulations already in place or being implemented, is significant. Most obviously, it is adding a major resource burden. By the end of 2014, Citigroup expects to have nearly 30,000 employees working on regulatory and compliance issues, up 33 percent since the end of 2011, while JPMorgan Chase is expanding its risk control staff by 30 percent.[4] In Europe, Deutsche Bank is doubling its compliance spending and adding at least 500 additional resources.[5] In 2013, HSBC announced plans to add approximately 3,000 compliance staff.[6] As many banks are now realizing, meeting stress testing compliance obligations is now a requirement to remain in business.

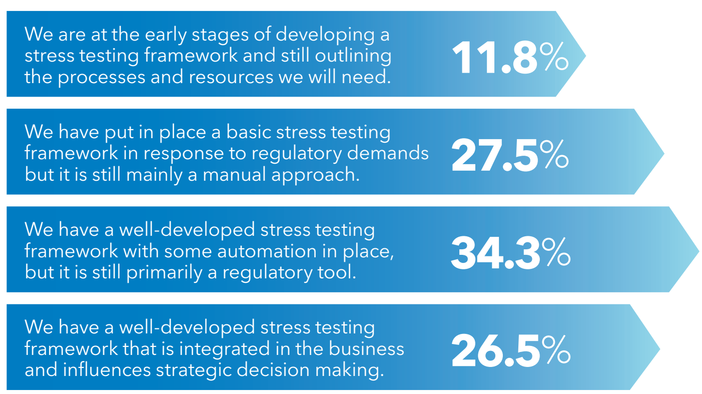
In this context, SAS and Longitude Research conducted an in-depth survey of more than 100 senior banking officials in both Europe and the US to assess how the rise of stress testing is affecting their organizations. We reviewed where investment is being focused, what the key priorities are with regards to stress testing, and how this is changing the oversight and management of these institutions. Following is a brief overview of key findings.

Many banks are still in learning mode when it comes to stress testing

A healthy minority of banks (27 percent) consider themselves highly mature with regards to the maturity of their organization's stress testing, especially among large top-tier institutions. They've developed a clear framework that not only deals with regulatory requirements, but is now also influencing strategic decision making.

However, many others acknowledge being at an earlier stage of maturity. Nearly 28 percent of banks surveyed have established a basic framework for stress testing, but say that it remains a largely manual process. Only 12 percent remain at the very early stages of development, still outlining the necessary processes and resources. Given that most tests focus on large institutions, readiness is weakest at smaller banks, where nearly 79 percent still rely on manual approaches, or have yet to set up a proper framework at all. This learning curve doesn't solely apply to banks; the regulatory authorities have also been refining their approach as they conduct more tests, which adds to the difficulties faced by banks.

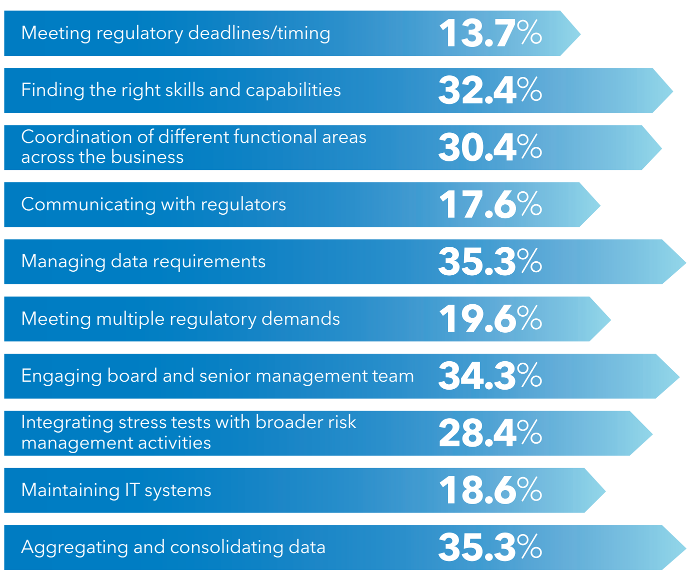
Chart 1: Overall, how would you rate the maturity of your organization's stress testing framework? Please select one only.



Data issues and a skills shortage are the biggest challenges for banks today

Managing data requirements and aggregating/consolidating data are the two largest headaches for banks when grappling with stress testing – each cited as a challenge by 35 percent. The sheer volume of data to manage is not the only issue, but also the quality of that information. In the last CCAR tests, several major US banks had test submissions fail due to data quality issues, and were penalized accordingly. Thirty-two percent reported difficulty finding the right skills and capabilities. Not only are highly qualified data analysts in high demand today, but many are intrinsically interested in working on the toughest and most interesting problems. This makes retention of skills an issue for many banks, even with their ability to pay above-market rates, as they struggle to motivate staff to remain enthused by what is largely a predefined regulatory issue.

Chart 2: Which of the following aspects of stress testing do you currently find most challenging? Please select up to three.



Other = 0% | Don't know = 0%

Investment has soared on the back of stress testing requirements, with banks especially focused on improving both data quality and modeling capabilities

Budgets for dedicated staff resources have seen the greatest increases, as the prior examples from Citigroup, HSBC and others suggest. Nearly one in five banks have made a "significant" increase in spending here, and one in 10 will do the same in terms of their spending on consultancy and advisory services. Overall, though, budgets will swell substantially on data, IT infrastructure and training. Looking ahead, almost half of the banks surveyed are prioritizing stronger modeling capabilities and better data quality. (See Chart 3.) What is rising in importance, but remains a lower priority today, is making better use of stress testing as a tool to improve overall business decision making (cited in a later finding).

Effectiveness on different aspects of stress testing varies widely

As pressure on stress testing mounts, many banks are less confident of their effectiveness in the stress testing exercise. Strengths are most evident in relation to reporting results back to regulators and responding quickly to requests. But many other areas are weaker: roughly one in three consider themselves "somewhat ineffective" or "not at all effective" at selecting the right risks to be stressed, or defining the right scenarios. This is especially the case within European firms. Even higher proportions remain weak on actually understanding the implications of stress testing for the wider business, which somewhat defeats the purpose of the exercise altogether. And about 44 percent say they're not at all effective in involving senior management; this is vital in ensuring that any of the stated goals on risk appetite are implemented further down the organization. (See Chart 4.) This is a clear risk as regulators get tougher in their stress testing requirements.[7]

Chart 3: In the past two years, what change has there been to the level of your investment in the following aspects of stress testing? Please rate from 1 to 5, where 1 is significant increase and 5 is significant decrease.

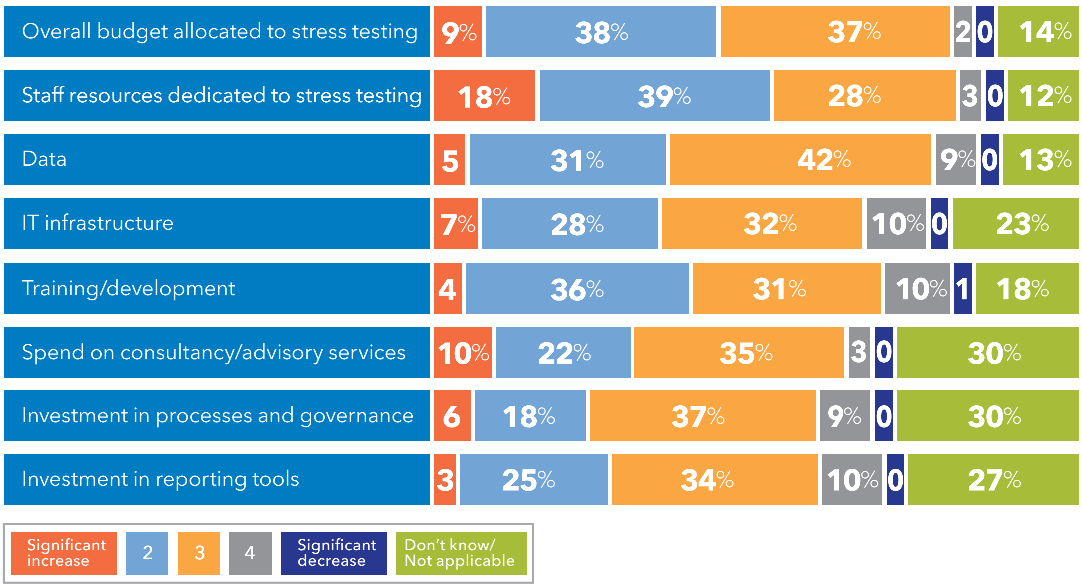
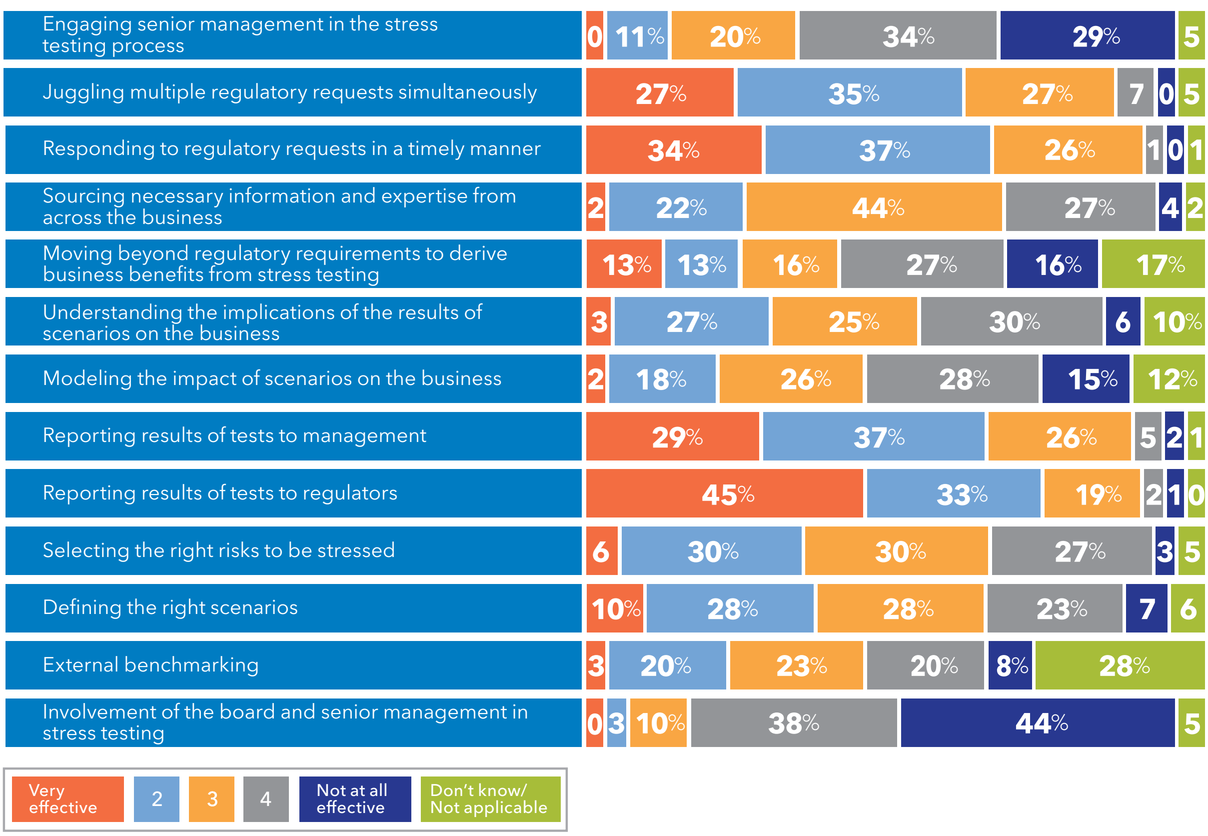


Chart 4: How effective is your institution at the following aspects of stress testing? Please rate 1 to 5 where 1 is very effective and 5 is not at all effective.

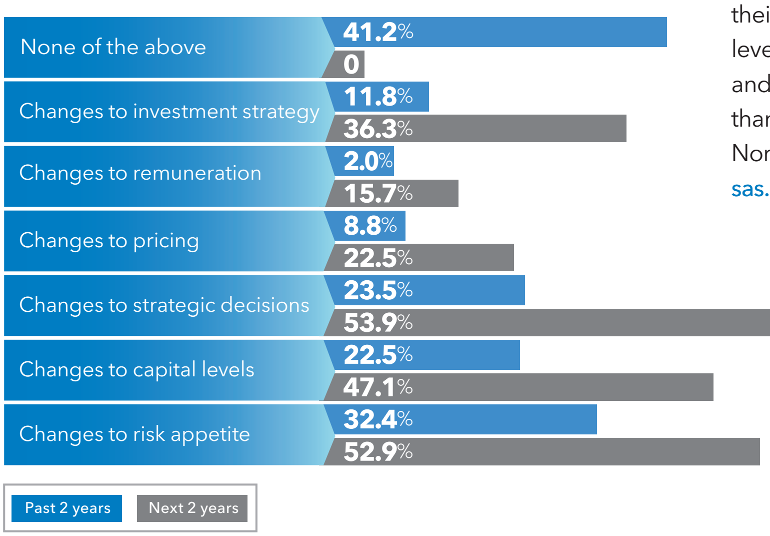


The next main challenge: Establish stress testing as a vital management decision-making tool

Stress testing is predominantly a compliance tool to most banks right now. However, it is clear that its scope can be widened to make it an important tool for better decision making; for example, by conducting what if analyses to assess how markets or products might be affected by certain conditions, or to consider how the returns on a new initiative might differ based on how key competitors react. The US Federal Reserve, in particular, is pushing banks to integrate their CCAR investments into other areas of the business, making it more commonplace among top tier banks.[8]

Overall, though, about 41 percent of banks today acknowledge that no business decisions have been directly influenced from work done on stress tests. Looking ahead, none believe that will be the case in two years, with over half expecting such tests to help drive changes to both strategic decisions and risk appetite – a striking transition.

Chart 5: In the past two years, which of the following business decisions have been directly influenced as a result of your regulatory stress testing, and which do you expect to be influenced in two years' time? Please select all that apply.



Only SAS delivers comprehensive risk solutions, proven methodologies and best practices to help your organization optimize capital, liquidity and meet regulatory demands for superior business performance. Establish a risk-aware culture throughout your organization and make better decisions with intraday, high-performance risk analytics.

Learn More

As stress testing rapidly becomes an indispensable factor in overall bank management – not just a way to ensure regulatory compliance – it provides valuable insights into the most fundamental interests of financial institutions. It's no longer just a tool for risk modelers, but also a tool for top management as a proven means of gaining an economic perspective and decision-making certainty.

The SAS Stress Test Benchmark, developed in cooperation with Longitude Research, gives an opportunity for banks to assess their relative degree of stress test maturity. It assesses resource levels, relative priorities leadership, engagement investment and more. We encourage you to compare your status to more than 100 senior risk and finance executives in both Europe and North America by completing the SAS Stress Test Benchmark at sas.com/benchmark.

How SAS Can Help

SAS can help to meet the challenges that a bank will face to deliver regulatory and economic scenario-based stress test needs. Our solutions:

- Provide tools that improve data quality and management required for successful stress testing.
- Support scenario and model management.
- Deliver aggregation and validation capabilities.
- Enable the flexibility needed to accommodate changing regulatory requirements.

If you would like to discuss these and other related findings in more detail, or to better understand these points in the context of your institution, please contact your SAS representative, or visit us online at sas.com/riskmanagement.

About SAS

SAS is the leader in business analytics software and services, and the largest independent vendor in the business intelligence market. Through innovative solutions, SAS helps customers at more than 70,000 sites improve performance and deliver value by making better decisions faster. Since 1976 SAS has been giving customers around the world THE POWER TO KNOW®.

Endnotes

[1] "Stress Tests and Capital Planning," Board of Governors of the Federal Reserve System, www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm.

[2] "EU-wide stress testing," European Banking Authority, http://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing.

[3] "Stress testing the UK banking system: key elements of the 2014 stress test," Bank of England, April 2014.

[4] "Citi will have almost 30,000 employees in compliance by year-end," The Tell, Wall Street Journal, July 14, 2014.

[5] "Deutsche Bank to hire 500 workers in US for compliance, risk," Bloomberg, July 9, 2014.

[6] "HSBC hires 3,000 as banks rush to bolster compliance," The Times, Sept. 25 2013.

[7] "Citigroup fights to recover from 'stress test' failure," Wall Street Journal, June 20, 2014.

[8] "Comprehensive stress testing: A regulatory and economic perspective," SAS, 2014.

To contact your local SAS office, please visit: sas.com/offices

107375_S130345.1014

THE POWER TO KNOW®