A Stress Testing Infrastructure for Regulatory Compliance and Beyond

The US regulatory environment is challenging banks to quickly develop solutions to meet more demanding stress testing requirements. These solutions have generally met the immediate regulatory needs but remain labor intensive, process poor and relatively unscalable. Now that the final rules for stress testing and proposed guidelines for Basel III have been published, institutions have an opportunity to take a long-term view on enhancing existing infrastructure to meet regulatory compliance and deliver long-term business value. This article outlines three elements which are essential to developing a sound stress testing infrastructure.

1. A Centralized Data Foundation

As regulatory requirements become more stringent and granular, data management becomes more complex. The key element of a sound infrastructure is a centralized data platform that consolidates multiple sources of internal and external data including loan-level balance sheet characteristics, borrower and property-level risk and financial data, economic and market insights, as well as any other information that could significantly impact the bank's cash flows, profit and loss, capital, liquidity and risk-adjusted performance. Data infrastructures should be able to capture, validate and integrate data as necessary to support regulatory driven and business models and analytics but also regulatory reporting requirements such as FR Y-14M/Q/A from the Federal Reserve and DFAST-14A from the FDIC and OCC.

Beyond immediate stress testing requirements, an integrated data strategy to incorporate Basel III requirements is critical given the synergies and overlaps between both frameworks. This will ensure consistency, reduce additional reconciliation effort and put institutions on the right track to meet current and future regulatory requirements.

2. A Flexible Infrastructure That Can Adapt to Multiple Needs

In order to meet regulatory requirements and provide banks with valuable insights to guide their business decisions, a flexible infrastructure would need to manage multiple data hierarchies and meet three primary objectives:

- Support multiple consolidation levels within a single framework and enable group-level and subsidiary-level analysis. This will ensure consistency within the entire group and reduce the overall cost of ownership.
- Consistently manage internal and regulatory hierarchies. Banks generally use a number of products and responsibility centers hierarchies for financial planning, capital allocation and risk management. In parallel, regulators define pro-forma structures for a uniform view across institutions. An appropriate data infrastructure should allow banks to manage these different hierarchies in parallel and link them through mapping mechanisms. This will greatly reduce regulatory maintenance while providing the business with actionable information.
- Manage each element of the analysis, balance sheet, income, losses, capital and risk-weighted assets, at the appropriate granularity and link them together through correct allocation/aggregation algorithms. This will allow banks to apply the optimal level of granularity to each purpose instead of managing the whole process at the same level of granularity. The latter case could either reduce accuracy if too aggregated or increase complexity if too granular.

3. Timely and Actionable Result Through Automation

Federal Reserve statistics show an average annual burden of 2,500 man/days for each respondent to the FR Y-14 information collection. Automation can greatly reduce these costs, limit errors, ensure consistency and improve results validation by running frequent benchmarks or challenger models using the same underlying data.

Stress testing should not only be limited to the annual or mid-cycle regulatory exercises, but also incorporated into the business as a best practice. The infrastructure should be built to provide management with frequent and up-to-date information to better manage risks, optimize capital allocation and ultimately maximize returns. It should factor in a wide variety of institution-specific or business-specific assumptions in addition to regulatory scenarios. Stress testing outputs need to be timely, especially in the current economy, in which macro and micro factors can suddenly change.

Risk-aware decision-making requires stress testing automation, transparency, audit and tracking capabilities, as well as flexibility to allow for insertion of expert judgment and factual assumptions into the analysis. In the current regulatory and economic climate, an institution leveraging this type of infrastructure could streamline its regulatory compliance and optimize and strengthen its business strategy. This ensures it will stay ahead of the competition while keeping pace with regulation.

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