Moving beyond the burden to opportunity

Banks of all sizes are impacted under this revised bulletin. The expansion of this guidance is leading financial institutions to place greater scrutiny on modeling practices and develop best practices that span across the entire business. Organizations are expected to ensure that the development, use and implementation of its models support a clear statement of purpose (i.e., is the model predicting what it's intended to be predicting?) and that comparisons can be made among alternative models. In addition, where possible, measurements should be taken to understand any model uncertainty to ensure the model is stable and predicting effectively what it is supposed to predict.

In addition to model accuracy, ongoing validations should identify potential limitations and assumptions and assess their impact. Models should be incorporated into an organization's broader risk-management framework. Model validators should be given authority to challenge appropriate incentives.

- **Benchmarking —** comparisons of model outputs to model performance of alternative models to ensure that the model that is used is the best predictor and has no better alternatives
- **Stress testing —** model performance evaluation over a wide range of parameter input values that are correlated with macroeconomic factors to ensure that the model is stable given macroeconomic fluctuations; this is especially important for helping to comply with Basel and CCAR
- **Sensitivity analysis —** evaluation of the impact of small changes to inputs or parameter values on model performance to assure that the best attributes and values are used in the model

While ongoing model governance ensures lending institutions are compliant with the most recent regulations, benefits go beyond regulatory compliance. By regularly evaluating model performance, institutions have the ability

Through regular model benchmarking, lenders can determine if there are unnecessary models or attributes that can be removed to streamline the decision process, reducing costs.

to incorporate new data elements or attributes not previously available in older models. These new data elements/attributes can help assess risk better, reducing losses associated with such risk. Through regular model benchmarking, lenders can determine if there are unnecessary models or attributes that can be removed to streamline the decision process, reducing costs. In addition to risk reduction and cost cutting, ongoing model evaluation also can help lenders broaden their customer base by not excluding customers who may inaccurately appear "too risky."

Compliance begins with a thorough business review to look at current risk exposures, business activities, complexity and the extent of the model that will yield a gap analysis and an action plan, or "blueprint," to close any gaps. Augmenting the current model risk-management infrastructure and processes is important to provide:

- **Back testing —** comparisons of actual model outcomes with previously recorded model outcomes to ensure that the model is performing as it was originally intended