

Panel on Supervisory Model Changes

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The views in this presentation are solely my own, and do not represent policies or positions of the Federal Reserve Bank of Boston or the Federal Reserve System.

Panel Overview

- Challenges in Modeling CRE Loan Defaults
 - Ronel Elul, Federal Reserve Bank of Philadelphia
- Supervisory Stress Test Modeling for Operational Risk
 - Azamat Abdymomunov, Federal Reserve Bank of Richmond
- How Might Capital Stress Tests Incorporate a Funding Shock?
 - Bill Bassett, Federal Reserve Board
- Introductory Remarks on Model Governance
 - Patrick de Fontnouvelle, Federal Reserve Bank of Boston

Model Development Governance

- Model Oversight Group (MOG): oversees development and implementation of supervisory stress test models and framework
 - MOG articulates principles and implements policies relative to model development and changes
 - Supervisory Modeling Teams (SMTs) report to the MOG
 - MOG assisted by Model Coordination and Advisory Team (MCAT)
 - Not responsible for scenario design
- System Model Validation (SMV): independent body responsible for validation of supervisory stress test models and controls
- Governance Committee: oversees the MOG and SMV

What motivates model changes

- To take advantage of better data
 - Longer time series, new variables etc...
- To improve aspects of the model identified through performance monitoring
 - E.g., model stability, backtesting results
- In response to validation findings
- To capture new risks (or risks that we did not capture before)
- As a result of longer term ongoing research

2-year development cycle: motivation

- Ensures that we are able to fully assess model changes, both conceptually and in implementation.
 - Models and processes are properly tested and controlled.
 - Full validation is complete before model use
- Enables us to run new models in parallel, and to better understand the impact of the model changes.
- Facilitates earlier discussion and disclosure model changes, both internally and externally.

2-year development cycle: definitions

- The “stress test year” begins in July, immediately after the conclusion of the previous year’s DFAST/CCAR.
- “Material model changes” involve substantial recasting of major model components and are likely to have a material impact on results.
- The “production model” is used to generate results for the current stress test year.
- The “development model” is maintained separately from the production model and is where model revisions are first implemented.

2-year development cycle: Implementation

- Stress Test Year 1
 - An SMT wishing to make material model changes first receives MOG approval based on initial research.
 - The SMT implements the changes in the development model.
 - The MOG reviews and approves the development model.
 - The current production model is used to produce year 1 results.
- Stress Test Year 2
 - The development model undergoes formal validation, receives approval from the Governance Committee.
 - The development model becomes the new production model, and is used to produce year 2 results.