Panel on Supervisory Model Changes

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The views in this presentation are solely my own, and do not represent polices 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.