The views expressed in this presentation are the author’s only and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System.
Borio, Drehmann, and Tsatsaronis (BDT) make a valuable contribution to the increasingly important area of stress testing of banks
  - Consider the impact of SCAP and CCAR in the U.S. and the EBA stress tests in Europe, and the ongoing public interest

BDT offer five propositions about “macro stress tests”:
  - A tool box, not a single tool
  - Not early warning devices
  - Big help in crisis management / resolution
  - Generate additional benefits
  - If done, should be done right

Discuss each proposition, informed by experience from SCAP, CCAR, and CCAR 2012
#1: A Tool Box, not a Single Tool

- Agree
  - Stress tests vary by goals, universe, horizon, level of granularity, firm v. system view, modeling approach, etc.

- Potentially conflicting goals complicate implementation and policy actions
  - Example: How to assess balance sheet growth if concerned about:
    - Microprudential safety and soundness of a given firm
    - Macroprudential lending capacity of the system
    - Macroprudential reduction of a firm’s systemic importance

- Applied stress tests contain many component models
  - Modular approach is needed, but adds to complexity and operational risk
  - Difficult to do standard errors or sensitivity analysis

- Little progress on incorporating feedback effects to the macroeconomy
  - Complicated conceptually and practically
  - Important area for future work
#2: Not Early Warning Devices

- Agree, but…
  - Should not expect stress tests to be early warning devices

- Stress test results are only as good as the shocks
  - Would we have predicted a 30% decline in U.S. home prices in 2006?
  - BDT want a “strong will to stress the system” and conservative mapping to losses, but inherently difficult to identify relevant shocks ex ante

- Early warning devices are critical (and the subject of much of this conference), but stress tests are unlikely to be the best tool for that objective
#3: Big Help In Crisis Management / Resolution

- Agree
  - Stress tests create new information for supervisors and markets

- Important benefit of SCAP was to “size the hole” and reduce uncertainty by providing more bank-specific information to the market
  - Made more credible by official sector capital backstop

- But, benefits for supervisors in other areas
  - Assess sufficiency of bank capital to support potential capital distributions
  - Ensure banks have comprehensive assessments of all risks
  - Evaluate integration of stress tests into the bank’s capital planning and risk management processes
#4: Generate Additional Benefits

- Agree, and…
  - BDT may undersell the importance of stress testing to banks

- Supervisors get critical cross-sectional information
  - Range of loss rates and revenues
  - Better understanding of the risk management frontier
  - Plausibility of business line assumptions, e.g., market share reallocation or balance sheet growth

- Banks should benefit from developing more rigorous stress testing processes
  - Effective capital planning by the banks requires an assessment of capital needs across a range of potential scenarios

- Stress testing should be part of the bank’s internal capital adequacy processes, not a separate add-on just for the supervisors
  - Avoid situation where banks perform stress tests for supervisors, but do not integrate implications into decisions for how they manage the business
#5: If Done, Should Be Done Right

- Agree, but…
  - This is really hard

- Disclosure and communication is complex
  - BDT recognize the importance, but big questions
    - What is the purpose of disclosing results?
    - Does the market want detailed inputs or insight into supervisor's perspective?

- Need to specify range of policy actions ex ante
  - BDT want a “clear follow-up plan”
    - What post-stress test actions are feasible – reduce distributions, raise capital, shrink balance sheet, change corporate structure, exit high-risk/high-return businesses?
    - How sure must one be to take action to mitigate low probability/high impact outcomes?

- Modular approach and scale/complexity of large banks requires an enormous resource commitment from the official sector
Additional Thoughts on Stress Tests

- Assessment of balance sheet evolution drives a possible divergence between microprudential and macroprudential goals
  - Fallacy of composition
  - Negative spillovers, e.g., margin spirals
  - May need to respond to safety and soundness, lending capacity, and systemic importance concerns separately with distinct tools

- Stress test results are primarily positive exercises, not normative ones
  - What would likely happen if a scenario occurred, not what one would like to happen
  - Example: A microprudential view of a firm’s capital adequacy across a range of scenarios, rather than a macroprudential tool to avoid credit contraction
Additional Thoughts on Stress Tests

- The severity of the scenario should not be a cyclical policy choice
  - BDT suggest to tighten the severity of the shocks in a boom
    - Would they suggest weaker shocks during tough times?
  - Stress testing may not be the best countercyclical tool

- Need to consider the authority to act against possible future outcomes
  - Many regulations are based on actual conditions, not projected stressed conditions
  - “Capital Plans Rule” in the U.S. provides new authority based on forward-looking metrics
Conclusions

- Stress testing is an increasingly important part of the supervisory process
  - Borio, Dhrehmann, and Tsatsaronis outline many key issues with practical implications

- Key takeaway – critical for all stakeholders to understand what stress testing can and cannot do
  - Some concern that stress testing will be seen as the answer to all problems – it isn’t

- Two areas for continued improvement
  - Conceptual research
    - Need a “general theory of stress testing” with goals in both and bad good times
    - Clarify the trade-off between potentially conflicting micro- and macroprudential goals
    - Feedback effects from financial sector to real outcomes
  - Practical knowledge-sharing
    - Dialogue among supervisors, banks, and private sector to identify best practices
    - Systematic ex post analysis to help understand what “works” and what doesn’t
Appendix
Comprehensive Capital Analysis and Review

- Federal Reserve began CCAR 2012 exercise last week
  - Capital plans rule was adopted to amend Regulation Y for large bank holding companies
    1. Requires annual capital plans
    2. Requires prior notice to the Federal Reserve before certain capital distributions
  - Instructions for 2012 exercise, including macro scenarios, made publicly available on the Fed’s website

- Key points for CCAR 2012
  - More than a stress test – assessment of capital plans, capital adequacy processes, capital policies, Basel III transition path, risk identification and measurement, etc.
  - Scenarios are not forecasts, but hypothetical outcomes designed to test the strength and resilience of the banks
  - Commitment to transparency
    1. Publish scenarios now and disclose firm-specific results in March 2012
  - Complements the legislative mandates from the Dodd-Frank Act